

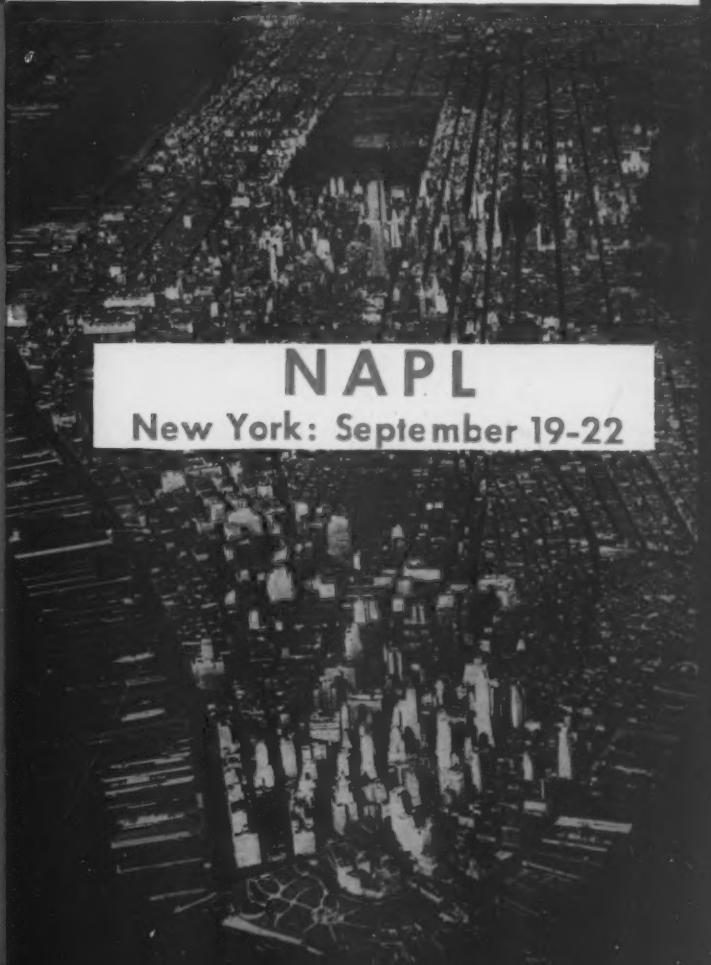
Modern

this issue

- { NAPL Meets in New York
- Pre-Separated Art Techniques
- Story of Crafton Graphic
- Craftsmen Discuss Offset
- Profit Sharing in Litho
- Automatic Roller Cleaner

SEPTEMBER, 1956

LITHOGRAPHY



NAPL
New York: September 19-22

Introducing a new
Linotype face
in an extra
bold weight



SPARTAN EXTRA BLACK

Here's a hard-hitting poster weight

black as a slug can be

that's perfect for retail display and department store ads. The new weight in the popular Spartan series is offered by Linotype in four sizes with Italic: 12-, 14-, 18- and 24-point. Interested? Send us your name and we'll put a specimen folder in the mail for you.

• LINOTYPE •

MERGENTHALER LINOTYPE COMPANY
29 Ryerson Street, Brooklyn 5, N.Y.

Agencies: Atlanta, Boston, Chicago, Cleveland, Dallas, Los Angeles, New York, San Francisco. In Canada: Canadian Linotype, Limited, Toronto, Ontario

L E A D E R S H I P T H R O U G H R E S E A R C H

Set in Linotype Bodoni Book and members of the Spartan family

Roberts & Porter service and Lanston equipment make the natural graphic arts combination!"

You hear comments like this from graphic arts leaders everywhere...from the front office, the camera room, the plate-making department.

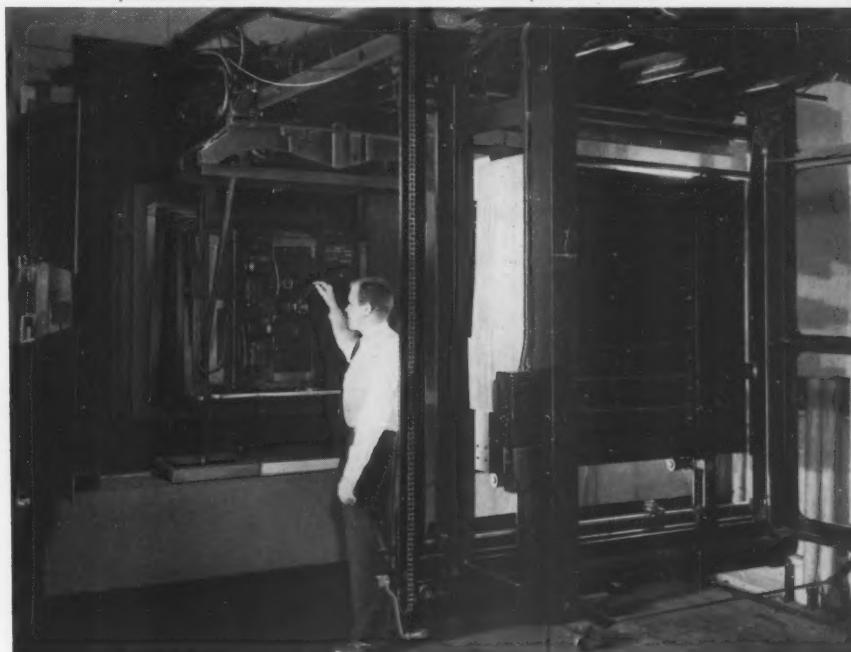
You see, lithographers who specialize in quality work recognize the advantages of having Roberts & Porter as sales and service headquarters for Lanston Monotype photo-mechanical and plate-making equipment. They know that this precision equipment, backed by that long-famous Roberts & Porter service, helps the men in the shop make the most of their talent, skill, and experience—keep costs under control and maintain quality.

And the men who work with this equipment day after day sing its praises. For example, cameramen like the wide-open accessibility of the M-H Precision Overhead Camera that speeds copy-loading and adjustments. They like the way this camera stays calibrated...the way the torque-tube construction so completely isolates the camera from building vibrations.

Find out how you can benefit from the advantages that come your way from the natural graphic arts combination of Roberts & Porter service and Lanston equipment—ask the Roberts & Porter branch near you for the whole story.



A. H. Schmitz, Vice-president in Charge of Production, Einson-Freeman Co., Inc., Fairlawn, New Jersey, was "pleased to hear that R & P now is sales and service headquarters for Lanston."



Expert craftsmen like Cameraman Jim Hoier, Fine Arts Lithograph Co., Kansas City, Mo., like the wide-open accessibility of the Lanston M-H Overhead Precision Camera...like the way it stays calibrated.

ROBERTS & PORTER

I N C O R P O R A T E D

General Offices: 555 West Adams Street, Chicago

NEW YORK
622 Greenwich St.

BOSTON
88 Broad St.

DETROIT
1025 Brush St.

BALTIMORE
5 South Gay St.

CINCINNATI
229 E. 6th St.

KANSAS CITY
1434 Wyandotte St.

PHILADELPHIA
1205 Hamilton St.

LOS ANGELES
920 E. Pico Blvd.

CLEVELAND
1825 East 18th St.

SAN FRANCISCO
1185 Howard St.

MILWAUKEE
1533 N. Jackson St.

WHAT LITHOGRAPHERS SAY ABOUT THEIR FOTOSETTERS

"We are very much pleased."

"We use the Fotosetter on numerous jobs of folders, monthly publications, broadsides, booklets, high school annuals, bank statements, catalogs and many other jobs."

"We are very much pleased with our Fotosetter and use it on all jobs we can, as we get a much neater and cleaner job this way."

"Broken or mashed letters are a thing of the past when you use a Fotosetter, as all type set is clean and sharp."

THE FRANKLIN PRESS, Inc.
Miami, Florida

"We are contemplating additional Fotosetters."

"We have had a Fotosetter machine in operation for the past three years. Last year we added a second Fotosetter. We are contemplating additional Fotosetters as our volume increases."

"We originally installed the Fotosetter for use in setting headlines and display type in our yearbooks. We have set headlines and display material for approximately 5000 yearbook orders."

"We have also found the Fotosetter ideal for setting advertising sections in our top quality line. We have set advertising sections on approximately 1000 yearbook orders."

"In the past two seasons, when capacity has been available, we have set copy on entire yearbook orders. Fotosetters are especially appropriate for yearbook production because of the interchangeability of faces and sizes."

WESTERN PRINTING AND LITHOGRAPHING CO.
Hannibal, Missouri

"Reproductions from the Fotosetter are very sharp."

"The quality of the printing or any reproductions from the Fotosetter are very sharp, and where it has been used by some of our clients they refuse to use hot metal typesetting, as the proofing and reproduction does not compare with the sharpness obtained by the Fotosetter."

THE QUALITY PRESS
Salt Lake City, Utah

"We are very happy with the installation, and the saving of time."

"We use the machine almost exclusively on business forms, such as snap-outs, and forms going over tabulating machines."

"We are very happy with the installation, and the saving of time."

THE REIN COMPANY
Houston, Texas

With one machine and one operator you get type on film . . . the product you need for lithographic reproduction . . . instead of going through all of the steps required when using conventional hot metal methods such as casting slugs, leading and making up, pulling repro proofs, retouching the proofs and photographing the copy. Are you interested in saving this time and also getting the sharpest, clearest reproduction possible? You already have a properly equipped darkroom. All you need is a Fotosetter photographic line composing machine.

If it isn't
made by Intertype
it isn't a
FOTOSSETTER.

INTERTYPE CORPORATION 360 Furman St., Brooklyn 1, New York

Chicago, San Francisco, Los Angeles, New Orleans, Boston
In Canada: Toronto Type Foundry Co. Ltd., Toronto, Montreal, Winnipeg, Vancouver, Halifax

Fotosetter is a registered trademark—Fotosetter Badoni and Future

Modern

LITHOGRAPHY

NAPL

Convention

Sept. 19-22

COVER

It's NAPL convention time again. This month (Sept. 19-22) the association is meeting at the Commodore Hotel in New York. Program emphasis is on the work shop approach, with four round table discussions on various shop problems. See page 54.

WAYNE E. DORLAND
Publisher

HAMILTON C. CARSON
Editor

FRANK T. HUMMLER
Associate Editor

RALPH DORLAND
Advertising Manager

ROBERT F. GARTY
Midwest Manager

CLIFFORD LINDEMAN
Circulation Manager



Feature Articles

Crafton Graphic: Quality Comes First.....	46
Pre-Separated Art Techniques..... By Herbert P. Paschel	49
NAPL To Meet Sept. 19-22.....	54
Litho Discussed at Craftsmen Convention..... By Gordon L'Allemand	56
Profit Sharing In Litho Plants.....	60
How Much Is Overtime Costing You?..... By Frank R. Turner, Jr.	64
Lithographers Like Automatic Roller Cleaners.....	67
Test Your Employees for Color Aptitude.....	74
LTF Training Programs..... By Charles Shapiro	85

Departments

Meeting Calendar	8
Letters To The Editor.....	43
Editorial	45
Technical Section	92
Photographic Clinic	103
By Herbert P. Paschel	
Litho Production Clinic	106
By Theodore F. Makarius	
Metal Decorating Section	109
Litho Club News.....	115
News About The Trade.....	117
Equipment Supplies, Service	139
Local Buyers' Guide	173
Classified Advertisements	175
Index to Advertisements	179
Tale Ends	180

MODERN LITHOGRAPHY

VOLUME 24, NUMBER 9

SEPTEMBER, 1956

SUBSCRIPTION RATES: One year, \$3.00; two years, \$5.00. Canada and Pan America, one year, \$4.00; two years, \$7.00. Foreign, one year, \$9.00; two years, \$15.00. Group subscription (U. S. only) Four or more entered as a group, \$2.00 each. (May be sent to different addresses.)

SINGLE COPIES: current issue: \$.50; all back numbers \$1.00. Postage and handling charges for foreign countries on single copies: \$1.00. Claims for missing numbers not allowed if received more than 60 days from date of mailing. No claims allowed from subscribers outside U. S. because of failure to notify Circulation Department of change of address, or because a copy is "missing from files."

PUBLISHED MONTHLY on the 5th by Industry Publications, Inc., Publication office: Box 31, Caldwell, N. J. Advertising rates made known on application. Closing date for copy — 10th of the month preceding month of issue. Second class mailing privileges authorized at Caldwell, N. J., with additional entry at New York, N. Y.

Address all correspondence to Box 31, Caldwell, N. J.

announcing

INVISI-STITCH*

a history-making development bringing you

A REVOLUTIONARY NEW DAMPENER COVER STITCH

now possible because of

TRI-MOL[®] (THREE-PLY
IMPORTED
MOLLETON)

with the EXCLUSIVE new HIDDEN RESERVOIR

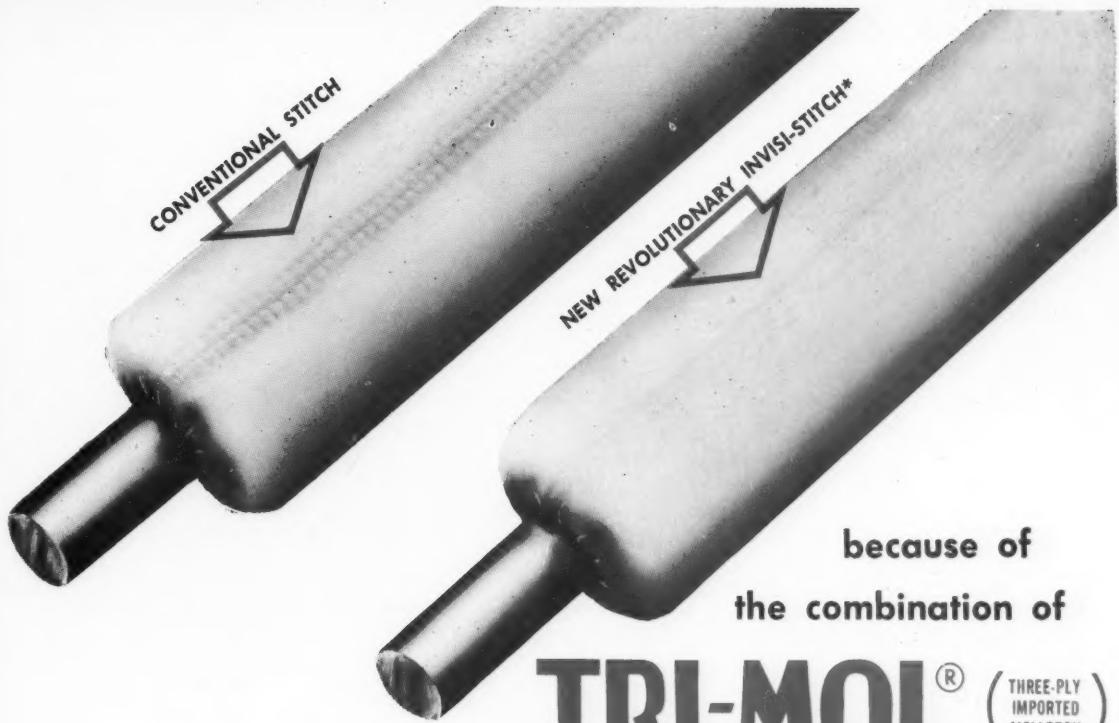
EXTRA PLY

TRI-MOL		SEAMLESS TUBING	ORDINARY 2 PLY MOLLETON
	ANCHORS THE OUTER PLY TO PREVENT STRETCHING		
	HAS MORE THREADS PER SQ. IN., KEEPING THE OUTER MOLLETON SOFTER...LONGER		
	RETAINS OUTSIDE DIAMETER TO HOLD DAMPENER SETTING LONGER		
	PREVENTS BAGGING OR PRESSURE BULGING		
	HOLDS WATER FOR MORE UNIFORM DISTRIBUTION		

SOLD ONLY THROUGH AUTHORIZED ROLCOR PRODUCTS DEALERS

SEE TRI-MOL[®] • SEE INVISI-STITCH* • BOOTH #3 • N.A.P.L. CONVENTION
HOTEL COMMODORE, N.Y.C. • SEPTEMBER 19 thru 22

*TRADEMARK OF ROLL-O-GRAPHIC CORP.



because of
the combination of

TRI-MOL® (THREE-PLY
IMPORTED
MOLLETON)

with the EXCLUSIVE new HIDDEN RESERVOIR

and **INVISI-STITCH***

you are now assured of the
FINEST WATER CONTROL AVAILABLE

- Seams CAN'T SPLIT from abrasion of stitches
- NO STITCH PATTERN to Spoil printed jobs
- NO more INK CLOGGED stitches
- NO SEAM BUMP assures perfect diameter

not yet available in Multilith or Davidson sizes;

MANUFACTURED BY

**ROLL-O-GRAFIC
CORP.**

133 PRINCE STREET, NEW YORK CITY

Trade Events

National Association of Photo-Lithographers, 24th annual convention, Sept. 19-22, Commodore Hotel, New York City.
National Association of Metal Decorators, 22nd annual meeting, Oct. 15-17, Chalfonte-Haddon Hall, Atlantic City, N. J.
Printing Industry of America, annual convention, Oct. 30-Nov. 2, Statler Hotel, Los Angeles, Calif.

Litho Schools

CANADA—Ryerson Institute of Technology, School of Graphic Arts, 50 Gould St., Toronto, Ont., Canada.
CHICAGO—Chicago Lithographic Institute, 1611 W. Adams St., Chicago 12, Ill.
CINCINNATI—Ohio Mechanics Institute, Cincinnati, Ohio.
LOS ANGELES—Los Angeles Trade Technical Junior College, 1646 S. Olive St., Los Angeles 15, Calif.
MINNEAPOLIS—Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis 3, Minn.
NASHVILLE—Southern School of Printing, 1514 South St., Nashville, Tenn.
NEW YORK—New York Trade School, Lithographic Department, 312 East 67 St., New York, N. Y.
Manhattan School of Printing, 72 Warren St., New York, N. Y.
OKLAHOMA—Oklahoma A & M Technical School, Graphic Arts Dept., Okmulgee, Okla.
ROCHESTER—Rochester Institute of Technology Dept. of Publishing & Printing, 65 Plymouth Ave., South Rochester 8, N. Y.
PHILADELPHIA—Murrell Dobbins Vocational School, 22nd and Lehigh, Philadelphia, Pa.
PITTSBURGH—Carnegie Institute of Technology, School of Printing Management, Pittsburgh.
SAN FRANCISCO—City College of San Francisco, Ocean and Phelan Aves., Graphic Arts Department.
ST. LOUIS—David Ranken, Jr., School of Mechanical Trades, 4431 Finney St., St. Louis 8, Mo.
VANCOUVER—Clark College.
WEST VIRGINIA—W. Va. Institute of Technology, Montgomery, W. Va.

Trade Directory

Lithographic Tech. Foundation
Wade E. Griswold, Exec. Dir.
131 East 39 St., New York 16, N. Y.
National Assn. of Photo-Lithographers
Walter E. Soderstrom, Exec. V.P.
317 West 45 St., New York 36, N. Y.
Lithographers National Association
W. Floyd Maxwell Exec. Dir.
420 Lexington Ave., New York 17, N. Y.
National Assn. of Litho Clubs
Frank H. Mortimer, Secy.
5917 33rd St., N. W.
Washington 15, D. C.
Printing Industry of America
James R. Brackett, Gen. Mgr.
719 15th St., N. W. Washington 5, D. C.
Internat'l. Assn. Ptg. House Craftsmen
P. E. Oldt, Exec. Sec'y.
307 E. Fourth St., Cincinnati 2.

In This Issue

● *Crafton Graphic Co., Inc.*, well-known New York litho house, has been taking top honors in graphic arts awards contests for the past few years. The company has scored in LNA, AIGA and other contests. How do they do it? Turn to page 46 for a picture story on the company.

● *Pre-separated art techniques* provide a flexible means of preparing copy for the camera that can save the average lithographer quite a bit of money—if he knows what they can and can't do. Photo Clinic columnist Herb Paschel makes a long and careful analysis of these techniques in the article starting on page 49.

● *Round tables, round tables, round tables . . .* four of them, to be exact, and a couple of panel discussions to spare. All part of the "workshop" approach being given the annual convention of the National Association of Photo-Lithographers, which will be held in the Commodore Hotel, New York, Sept. 19-22. Complete program and other notes may be found on page 54.

● *Lithographers had much to listen to at the recent Craftsmen's convention in Los Angeles*, which was focused on the production steps rather than the process, as in former years. Our special report starts on page 56.

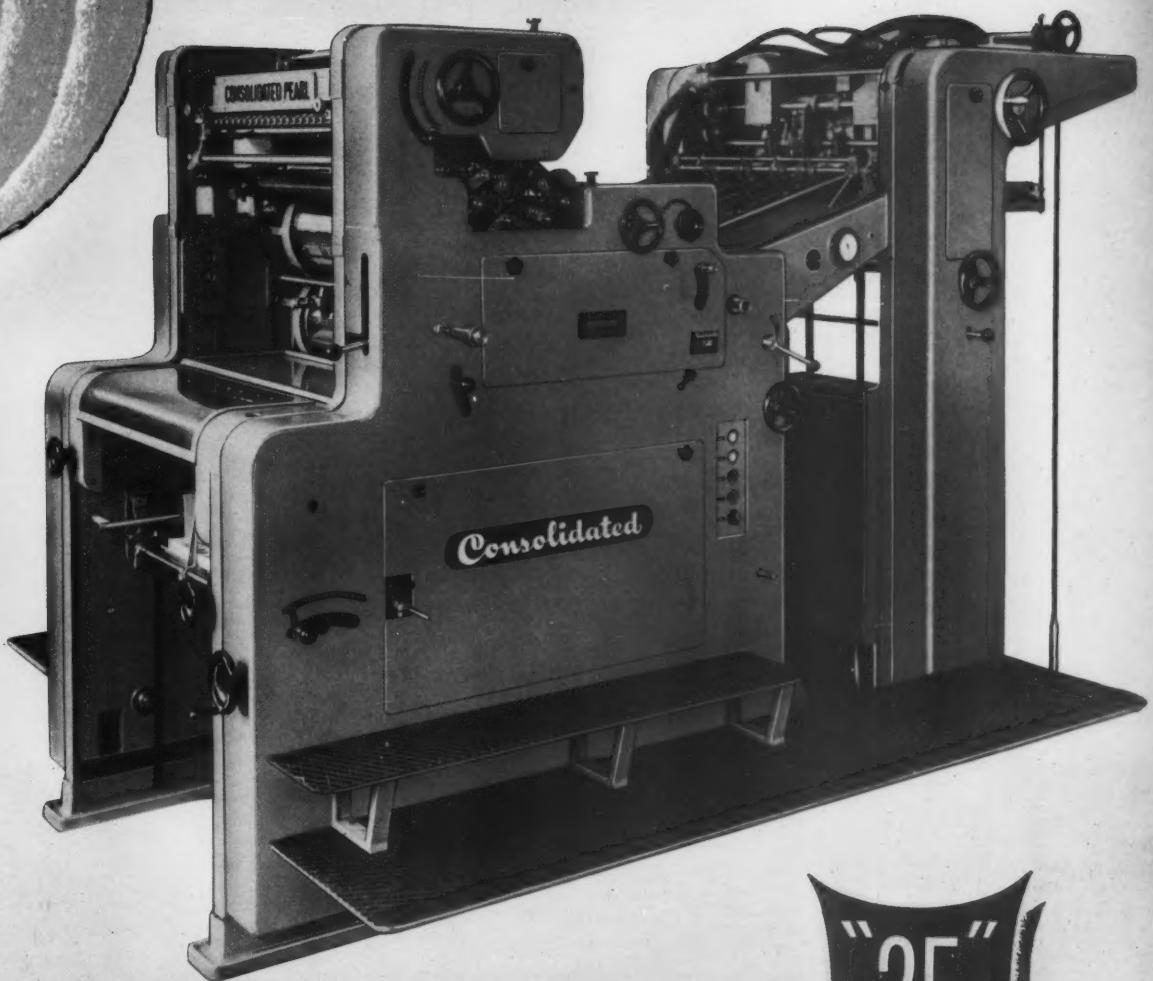
● *Profit sharing* in the graphic arts is gaining favor each year. For a roundup outlining how three prominent litho and combination shops handle such programs, see page 60.

● *If you don't watch your costs, overtime can really knock the profit out of a job, and quickly*. Cost accountant Frank Turner, of NAPL, tells you how to keep tab on this important cost. Page 64.

● *Automatic cleaners* for dampener rollers have been well received by lithographers, according to two recent surveys. Page 67.

● *Other articles* deal with color aptitudes, brush graining, and LTF training programs, along with the regular columns and departments.

announcing



THE NEW CONSOLIDATED PEARL

"25"

A new size — a new Press — the Consolidated Pearl Press 25"! Four new and improved features have been added to make the Consolidated Pearl "The Press of the Year"! Letterpress printers . . . offset lithographers . . . small plants . . . large plants and those in between . . . are installing these Presses from Coast to Coast. This Swiss-built Precision Offset Press will now handle a sheet 19" x 25" and will print at speeds over 8,000 sheets an hour. This new size will allow bleeding of the 9" x 12" letterpress format and will handle the 8½" x 11" offset size more efficiently. Here is the Press the letterpress printer has waited for with which to go into offset. Here is the Press for the offset lithographers to handle their higher quality work on a small, low cost, operation. You will have to see it to appreciate it!

1. A new, improved automatic water level control.
2. The non-stop delivery permitting unloading while Press runs.
3. A new faster, simpler, ink washup device.
4. A higher pile feeder of more than 60 inches.

See page 98, and read what plant owners are saying about the Swiss Wonder Press — The Consolidated Pearl.

CONSOLIDATED INTERNATIONAL

EQUIPMENT AND
SUPPLY COMPANY

1112 N. HOMAN AVE. • CHICAGO 51, ILLINOIS • Phone BRUNswick 8-4000

330 WEST 28th STREET NEW YORK 1, NEW YORK
PHONE ALGONQUIN 5-4950

1430 VENICE BOULEVARD, LOS ANGELES 8, CALIFORNIA
PHONE RICHMOND 8-3896

1190 BENNINGTON STREET EAST BOSTON 28, MASSACHUSETTS
PHONE EAST BOSTON 7-2921

quality controlled . . .
quality tested . . .
quality performance!

SINVALCO

Chemicals

Achieving perfection isn't accidental. It's the result of executing an idea from laboratory to finished product with painstaking attention to the smallest detail—until the most exacting requirements become practical realities. That's how SINVALCO Chemicals are produced. And that's why they are the most effective line of standardized chemicals on the market today. Every SINVALCO product is the result of a rigid system of quality control over both raw material and finished uniformity. Time-tested formulas assure you of top efficiency and superior results on every job. Regular use of SINVALCO Chemicals saves valuable time . . . reduces variation and spoilage to an absolute minimum—produces higher quality at lower cost per job! Try S&V chemicals now—for complete satisfaction!

OVER 35 BRANCHES

PROVIDE SERVICE

FROM COAST TO COAST

THE LITHO-CHEMICAL DIVISION OF
SINCLAIR AND VALENTINE CO.
Main office and factory: 611 West 129th Street, New York 27, N.Y.



Paper problems?



*This
isn't
the
answer!*



the smart thing to do is...

call your

Nekoosa
**paper
merchant!**

Yes, we admit this is an exaggeration.
Printers don't pick papers blindfolded.

But we did want to call your attention
to this important point: you needn't
grope in the dark for the right
answers to your paper problems.

Your Nekoosa paper merchant is
always ready with the answers.

Sizes . . . weights . . . colors . . . finishes?

Ask your Nekoosa paper merchant!

He wants to be of service
in every way he can.

YOU - the printer

and your **Nekoosa**
PAPER MERCHANT
are a team!



NEKOOSA PAPERS: Nekoosa Bond • Nekoosa Ledger • Nekoosa Duplicator • Nekoosa Mimoo • Nekoosa Manifold
Nekoosa Offset • Nekoosa Opaque • Nekoosa Master-Lucent • and companion ARDOR Papers

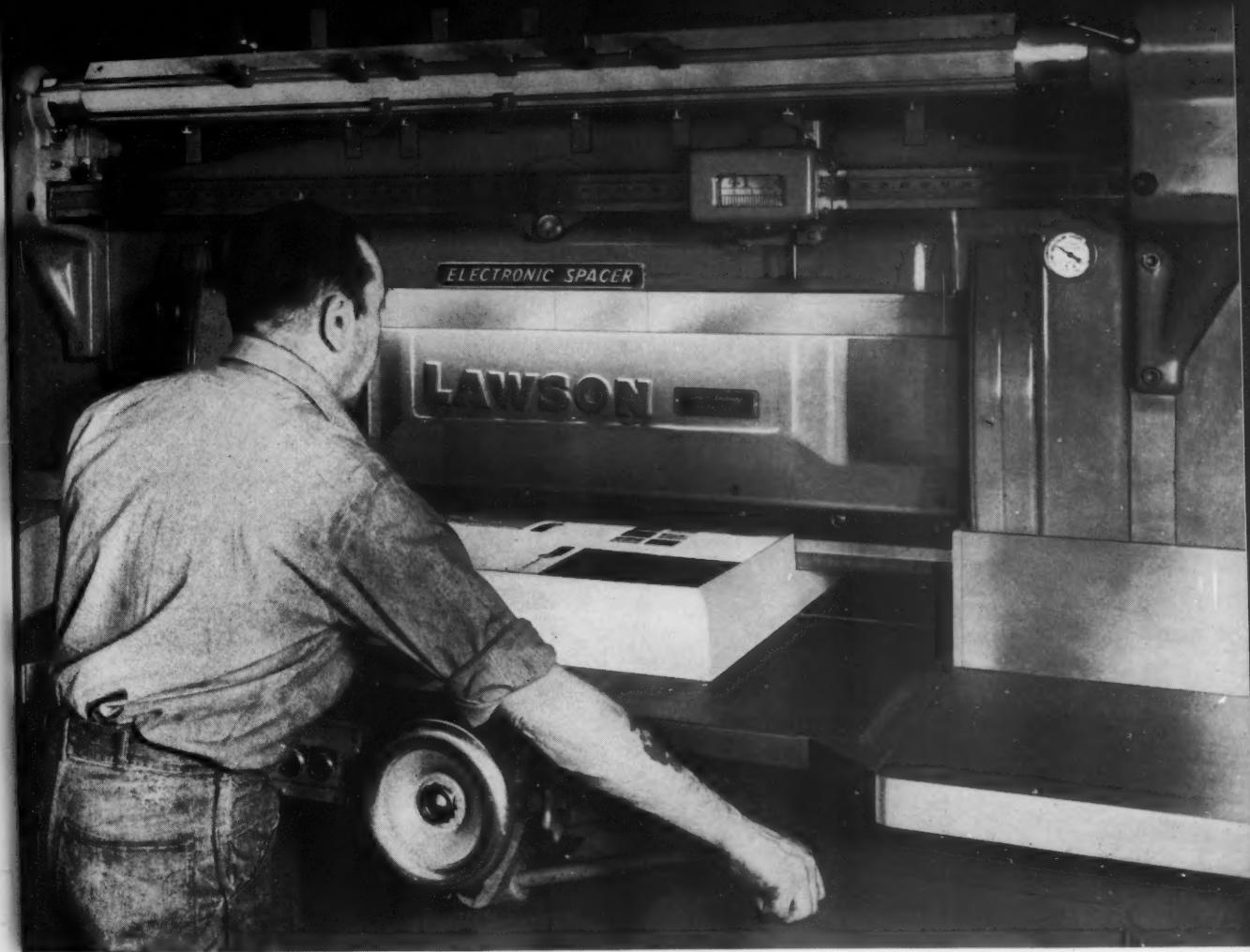
david M



GURIN-RAPPORT INC.

217 SO. JEFFERSON ST. CHICAGO

of the David M. Blanket



this operator is **cutting costs**

... with a new LAWSON SERIES V-65 HYDRAULIC cushioned CLAMP CUTTER that cuts more and higher lifts with unsurpassed accuracy.

LAWSON CUTTERS CUT COSTS . . . by cutting all papers smoothly and accurately. The gentle, *truly cushioned* hydraulic clamp holds the lift of paper firmly without marring top sheets or disturbing the alignment of the stock. The straightline knife pull cuts 6½" lifts smoothly and with exceptional accuracy . . . not a "ripple" in the cut edge.

LAWSON CUTTERS CUT COSTS . . . by increasing productivity per man hour. Higher lifts, easier handling and greater speed set new production standards. Set-up time is reduced — all controls are located in front of the machine within easy reach of the operator. Rugged Meehanite iron construction and simplified design with gears in a sealed bath of oil make maintenance easy.

Use this coupon. Send for an informative, fact-filled LAWSON CUTTER brochure, today.

E. P. LAWSON CO.

Main office: 426 WEST 33rd ST., NEW YORK 1

CHICAGO: 628 SO. DEARBORN ST.

BOSTON: 176 FEDERAL ST.

PHILADELPHIA: BOURSE BLDG.

LAWSON CUTTERS CUT COSTS . . . with built-in safety features. The many safety features found only on LAWSON cutters give greater protection to the operator and the machine. Keeps insurance costs to a minimum.

LAWSON CUTTERS CUT COSTS . . . because they're as modern as tomorrow. Yet they are built with the skill and experience gained in more than half-century of cutting equipment specialization. Planned to grow with your needs, the standardization of design permits the addition of an Electronic Spacer for "automatic" cutting, right on your own floor.

If you are contemplating expansion of your cutting operations or replacing old-fashioned equipment, you owe it to your balance sheet to get the full story about the finest, most economical cutter you can own.



E. P. LAWSON COMPANY

426 WEST 33rd ST., NEW YORK 1, N. Y.

PLEASE SEND SERIES V-65 CUTTER BROCHURE TO:

NAME

COMPANY

ADDRESS

CITY STATE



Founded 1920

BETTER APPEARANCE **PLUS**
PERFECT PRESS PERFORMANCE

INSTA-LITH BLACK and COLORS
• Set Quick • Dry Hard • Satin Gloss

Howard Flint Ink Co.
•Gravure • Letterpress • Lithographic • Flexographic

ATLANTA • CHICAGO • CLEVELAND • DENVER • DETROIT • HOUSTON
INDIANAPOLIS • LOS ANGELES • MINNEAPOLIS • NEW ORLEANS • NEW YORK • TULSA



**WHAT'S
YOUR
BLANKET
PROBLEM?**

Send for your
copy of the
EXTRON STORY!



Is your present blanket too absorbent, or not absorbent enough for proper lifting? Does it smash too easily, and come back too slowly? Embossing or debossing? Does make-ready time cut into your profits?

If one of these is your problem, the Samson Offset Blanket can solve it. The Samson absorbs just enough oil from your ink to lift properly, but not so much that enamel stocks will stick to it. The *smash-proof* blanket has not yet been invented, but the Samson *retards* smashing, and comes back quickly.

The special compounding of the Samson blanket assures you of the very minimum of swelling and shrinking. Precision machinery used in the manufacture of this blanket levels out the tiny hills and valleys found in most blankets. This means less make-ready time.

The Samson Offset Blanket is a premium product sold at a regular price. It is fully guaranteed by SAM'L BINGHAM'S SON MFG. CO.

Call, write, or wire your nearest Bingham factory for more information about the **SAMSON OFFSET BLANKET**.

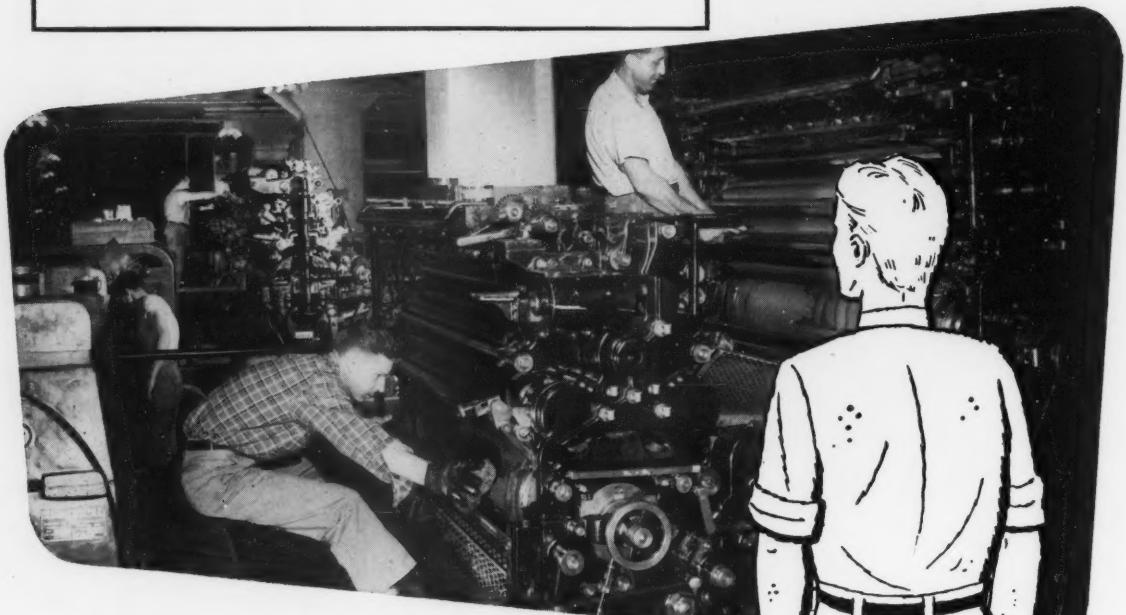
Home Office
CHICAGO
ATLANTA
CINCINNATI
CLEVELAND
DALLAS
DES MOINES

DETROIT
HOUSTON
INDIANAPOLIS
KALAMAZOO
KANSAS CITY
MILWAUKEE
MINNEAPOLIS

NASHVILLE
OKLAHOMA CITY
PITTSBURGH
SEARCY, ARK.
ST. LOUIS
SPRINGFIELD, O.
TAMPA, FLA.

when you think of

PRE-SENSITIZED PLATES



think of PITMAN

Join the many progressive lithographers who now depend on Pitman for all pre-sensitized plate requirements.

Make Pitman your one source for the best, not only for pre-sensitized plates but for all lithographic supplies and equipment. At Pitman, you'll always find quality, selection and service. There's an office near you.



HAROLD M. PITMAN CO.

*Chicago 50, Illinois — 33rd Street & 51st Avenue
North Bergen, New Jersey — 1110 13th Street
Cleveland 11, Ohio — 3501 West 140th Street
New York 26, New York — 230 West 41st Street
Boston 10, Massachusetts — The Pitman Sales Co.
226 Summer Street*

*Our fiftieth year
1906-1956*

"improved"

DIS-COVER

DISPOSABLE
DAMPENING ROLLER COVER

So EASY to apply that even

I can do it—in minutes—

My "Boss" asked me to cover these rollers just to show you how simple and easy it is to change our **DIS-COVER***



- (1) WET IT
- (2) TIE IT
- (3) STRETCH IT
- (4) TIE IT



FIVE times Tougher and TWICE as easy to apply

Now pre-cut to size, with a draw cord in one end, for all Harris, ATF and Miehle presses of the 14 x 20 - 17 x 22 - 21 x 28 - 22 x 34 sizes.

Now — **DIS-COVER** is PRE-WETTED before application to the wet dampening rollers. No tubes or special equipment is needed. Simply dip your improved **DIS-COVER** in clean water, it becomes very soft and stretchy, and gather it in your hands and pull it over your roller. It takes but a minute and hugs tightly.

Improved chemical treatment makes the **DIS-COVER** more effective than ever in keeping water demand very low. Improved chemicals increase the attraction of scum and tint from your plates, yet, the **DIS-COVER** remains cleaner than our previous fabric.

DIS-COVER* is manufactured by NORMAN A. MACK ASSOCIATES for

VAN SON HOLLAND INK
CORP. OF AMERICA

92 Union Street

Mineola, N. Y.

*Trademark registered and patents applied for

AN AMERICAN *First*

AQUATEX-DAMPABASE ARE THE ORIGINAL SEAMLESS DAMPENING-ROLLER COVERINGS

FIRST on the lithographic scene . . . first in quality . . . first and *only* dampening-roller coverings available to master lithographers in pre-cut lengths to fit any dampening roller—that's the proud history of AQUATEX outer covering and DAMPABASE under-cushion. They're still available, of course, in the familiar center-release carton containing roll lengths.

ACCEPT NO SUBSTITUTES! Sure, imitations of AQUATEX-DAMPABASE have crept into the market, but there is simply no other dampening-roller covering "just as good" as the original—AQUATEX and DAMPABASE. Their seamless, wrinkle-free knitted texture provides uniform, regulated dampening to every part of every plate. Therefore, you're sure you have the best when you slip on a set of AQUATEX-DAMPABASE coverings.

AQUATEX® DAMPABASE®
PATENTED
A Size for Every Press ®

Your roller diameter and length are the only measurements needed in ordering pre-cut lengths of AQUATEX and DAMPABASE. Order today—fast delivery is guaranteed!

GODFREY ROLLER COMPANY

Roller Makers for 91 Years

211-221 NORTH CAMAC STREET, PHILADELPHIA 7, PA.
Locust 7-1020

not just ink...but a

COMPLETE INK SERVICE

Experienced GBW ink technicians work with you helping you solve ink problems.

Through personal understanding of your ink requirements, we can supply you with trouble-free inks that have the proper working qualities for your shop.

Our complete ink service saves you time and money and makes it easier for you to produce the finest in printing.

GAETJENS, BERGER & WIRTH, INC.

★ Letterpress Inks ★ Litho Inks
★ Tin Litho Inks ★ Die Stamping Inks

*Traditionally
Fine Inks
for Over a
Century*

GBW

INKS



Mexico 8 D. F.
Calzada Ixtapalapa 326-B
Phones: 27-92-78; 27-90-59

Member of:

New York Ink Makers Association
Lithographic Technical Foundation
Milwaukee Chamber of Commerce
Wisconsin Ink Association
National Association of Printing Ink Makers
National Printing Ink Research Institute
Chicago Printing Ink Mfrs. Association
Illinois Chamber of Commerce

Pick a card... Any card...



but be sure it's Falpaco

No matter which one you choose, you are sure of getting a quality card that performs on any job.

Keep in mind that you are in good company . . . generations of printers and production men in all processes have continually used FALPACO coated blanks because of their superior printing qualities.

Falulah offers a complete range of coated blanks,

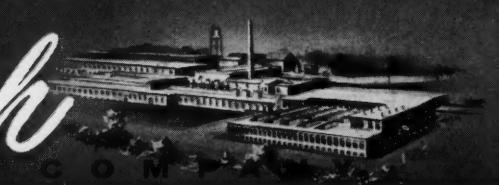
coated one or both sides, white and colors and specially coated for lithography . . . also specially coated for letterpress and screen process. Specify FALPACO on your next job and see the difference.

Falulah also makes FALPACO coated folding bristol — a versatile bristol that gives maximum results in printing, scoring and die-cutting.



alulah

AMERICAN



NEW YORK OFFICE — 500 FIFTH AVENUE, NEW YORK 36, N. Y. • MILLS: FITCHBURG, MASS.



TWO GREAT PLATES JOIN FORCES...



UNDER ONE GREAT NEW LABEL!

Harris-Seybold's Chemical Division and Lithoplate Inc., now join their facilities and plate making know-how into ONE operation. Both fine offset plates will now be combined and manufactured as one . . . a super-quality, 2-sided plate with exclusive "MICRO-SURFACING." The product will be known as the Harris Alum-O-Lith Sensitized Plate.

LITHOPLATE, INC.

A subsidiary of Harris-Seybold Company

HARRIS
ALUM-O-LITH
SENSITIZED PLATES AND SUPPLIES

WESTERN: 278 Arden Drive, El Monte, Calif.
EASTERN: 5308 Blanche Ave., Cleveland 22, Ohio
SOUTH EASTERN: 523 W. Broad, Richmond, Va.
MIDWESTERN: 3860 63rd Street, Chicago, Ill.

THE
Bychrome
**Punch-and-Repeat
MACHINE**



...a low cost, high precision
step and repeat device, ideal for...

LITHOGRAPHERS

A BIG STEP FORWARD IN
STEP-AND-REPEAT
TECHNIQUE...BY THE MAKERS
OF
Bychrome
SCREEN TINTS

New Price — \$69.50

Write for "How to Use" Folder

You can save hours of time and get hairline accuracy in: step and repeat setups, double printing, registering color (two, three, four or more) in single or multiple forms.

THE BYCHROME PUNCH-AND-REPEAT SYSTEM

Is simplicity itself. Any operator can learn its use in five minutes. No job is too simple to benefit by its use. No job is too large or too complex to strain its capabilities. Your operators will discover dozens of ways this handy precision system will speed up operations and guarantee best results. The ByChrome Punch-and-Repeat Machine is available only through your regular dealer. He will be glad to give you a demonstration and provide full details on the system. Call him today!

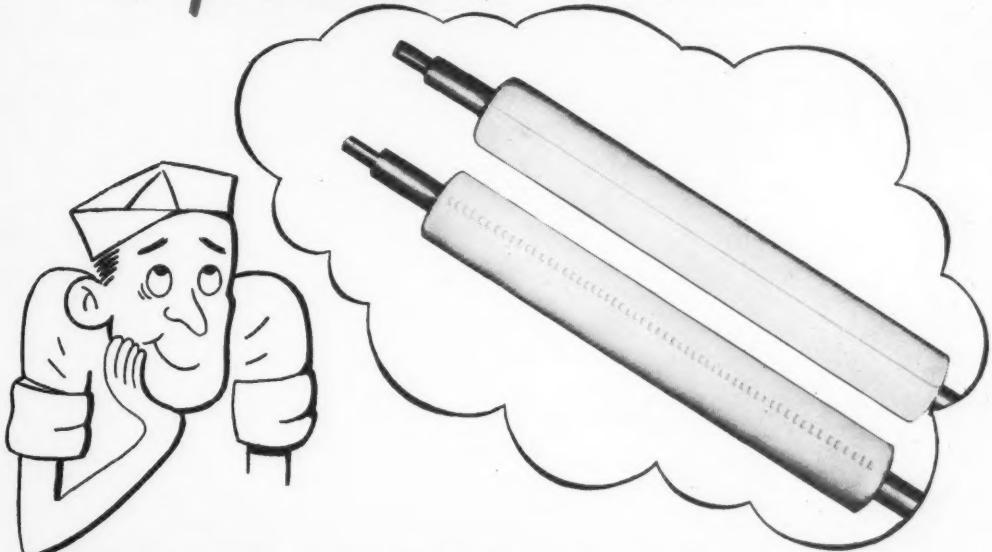
A PRODUCT OF THE

Bychrome

COMPANY, INC.

200 East Lynn • Columbus 15, Ohio

a pressman's dream...



**Finest Quality French & Domestic
MOLLETON ROLLER COVERS**

"THEY PULL ON . . . FIT PERFECTLY!"

Eliminating loose dampers . . . stops fussing
with wrinkled, poorly fitted roller covers.
Specify French or Domestic MOLLETON.

Tested and acclaimed by critical
users as the ideal Roller cover.
A perfect fit guaranteed, every time.



"OVER HALF A CENTURY" OF SERVICE

J. H. & G. B.

SIEBOLD

EVERYTHING FOR THE LITHOGRAPHER
MANUFACTURERS OF PRINTING, LITHOGRAPHIC INKS AND SUPPLIES
150 VARICK STREET, NEW YORK 13, N. Y.

MEMBER: Lithographic Technical Foundation
—National Association of Photo
Lithographers—National Association of
Printing-Ink Makers—National Printing
Ink Research Association—
N. Y. Employing Printers
Association.
SIB 2999



Dresses by Jack Horwitz

Shoes by Capezio

Hats by John Fredrics

ACCENT ON RUNABILITY

What a pleasure it is to see a printing paper run through a press like a scared rabbit.

Not all papers will, as you know—only those that have runability built into them at the mill.

In Kimberly-Clark Coated Papers such things as dimensional stability, ink receptivity, strength, opacity and many other qualities are carefully balanced to give you maximum performance.

Every sheet in every grade is "engineered" to meet the demands of today's modern printing.

It will pay you to compare Kimberly-Clark Printing Papers in any way you choose—including their cost. We're as close to you as your nearest distributor.

**Everything comes to life
on Kimberly-Clark Papers**

*for Modern Lithography . . . Prentice Offset Enamel
Lithofect Offset Enamel • Shorewood Coated Offset
Fontana Dull Coated Offset*

*for Modern Letterpress . . . Hifect Enamel • Crandon
Enamel • Trufect Coated Book • Multifect Coated Book*

Kimberly-Clark

COATED PRINTING PAPERS



Kimberly-Clark Corporation • Neenah, Wisconsin

The surest way to more printing production profits is to increase output of your present equipment without sacrifice in quality. And, if you can improve quality at the same time, you are competition and hard to beat!

ANNOUNCING

THE NEW, REVOLUTIONARY OXY-DRY SHEET CLEANER

You BUY MORE PROFITS when you purchase the OXY-DRY SHEET CLEANER. Actual tests* show that your presses will deliver about 5% more impressions per hour, you'll stop the presses for wash-up about 12 times less per shift, save about 100 press sheets and the ink wasted in restarting after washups. This means that inside one year the OXY-DRY SHEET CLEANER will pay for itself...after that, it's all profits for you. Maintenance, repair and service will be negligible...the equipment is engineered to last the life of the press.

The OXY-DRY SHEET CLEANER is the only sheet cleaner that uses both air and suction ★ Operates within $\frac{1}{8}$ " of

sheet for positive consistent cleaning action ★ Improves register control ★ Dry spray can be used every time sheet goes through the press ★ Can be installed in two hours on either web or sheet fed presses ★ Flexible—one vacuum-blower differential unit can be moved from press to press to operate any OXY-DRY cleaner head in your plant ★ Successful installations have been made in Meredith Publishing Co., Kable Bros., Popular Mechanics and other leading printing plants where speed and quality are constant aims...Increased profits they are getting can be yours too ★ To get more information on OXY-DRY SHEET CLEANERS, write, wire or phone us now.

* 5 Color Cottrell 36" x 48"—Sheet Fed
More details on request

Patents granted and Pending
Copyright 1956



*means more profits for the
graphic arts industry*

OXY-DRY SHEET CLEANER CORPORATION

1134 West Montrose Avenue, Dept. ML, Chicago 13, Illinois

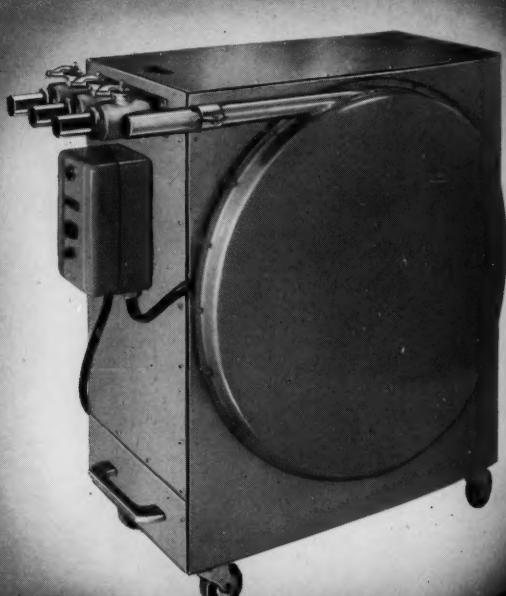
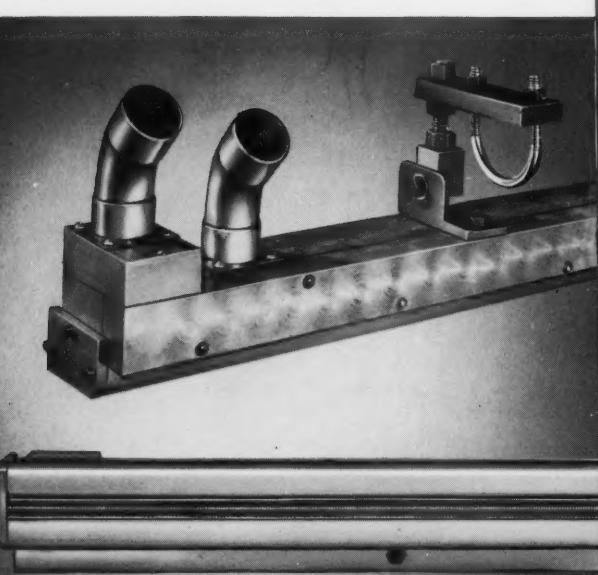
NEW YORK

CHICAGO

SAN FRANCISCO

Photo below shows close-ups of the OXY-DRY SHEET CLEANER vacuum-blower head and head face.

Photo below shows the vacuum-blower differential unit for the OXY-DRY SHEET CLEANER



THE REVOLUTION OF '56

Metalife

SUPREME PRESS FOUNTAIN SOLUTION

a radically new fountain solution that will revolutionize lithographic printing from all types of plates and presses



SUPREME PRESS FOUNTAIN SOLUTION

is guaranteed to stop plate oxidation completely—will prevent scumming, thickening of the image and fill-in.

SUPREME PRESS FOUNTAIN SOLUTION

does not contain or require gum arabic—will eliminate ink emulsification, tinting and blinding of the image.

SUPREME PRESS FOUNTAIN SOLUTION

is guaranteed to be non-toxic—it does not contain any corrosive acids, chromates or nitrates.

SUPREME PRESS FOUNTAIN SOLUTION

is economical (only \$5.25 per gallon in case lots). Dilutes 1-1½ ounces to a gallon of water. Will not deteriorate in the container or press fountain.

SUPREME PRESS FOUNTAIN SOLUTION

works equally well with all types of plates, on small or large presses—makes every plate print cleaner and longer with a tone fidelity and depth of color never before possible.

SUPREME PRESS FOUNTAIN SOLUTION

has been setting new records of press performance and print quality wherever used. See for yourself how good lithographic printing can really be.

Order it today, direct, or from your favorite local supplier.

WILLIAM A. FRANGOS, INC.

Devoted exclusively to research and production of
lithographic platemaking chemicals and processes.

241-10 HILLSIDE AVE. • BELLOISE 26, LONG ISLAND • N.Y.



HILLCOURT OFFSET * FITCHBRITE * MONTCLAIR VELLUM * DIAMOND WHITE VELLUM * FITCHBURG GOLDEN PARCHMENT

Something New



The familiar trademark of Fitchburg Paper Company is wearing a new badge this year. It denotes this company's 95th Anniversary of making fine papers.

During the years we have grown in experience, in reputation, and in size. Some of our customers have been with us almost since the mill started. They like the papers we make and say we are a good mill to do business with.

If you use paper in substantial amounts, we can prove both points to you, as well.

Fitchburg Paper Company

MILLS AND GENERAL OFFICES: FITCHBURG 6, MASS.

NEW YORK OFFICE: 250 PARK AVE., N.Y. 17



BETTMAN ARCHIVE



in the modern
shop, it's

ANSO Reprolith Ortho Film

MAKE BETTER COPIES of line or halftone originals, in black-and-white or color, with *Ansco Reprolith Ortho Film*. Full ortho sensitivity, high contrast! This versatile film permits the use of filters to improve copy rendition, cut down on handwork on negatives. Like all Ansco Films, it offers high resolving power . . . fine dot-etching properties . . . steep gradation . . . wide latitude.

AND FOR MAXIMUM DENSITY AND CONTRAST, use fast-working *Ansco Reprodol Developer*, the convenient dry powder mix available in units making 2, 10 and 25 gallons of solution.

Ansco, Binghamton, New York. A Division of General Aniline & Film Corporation. "From Research to Reality."

Visit us at Booth No. 22
NAPL Convention

ANSO...

graphically the finest since 1842



HAMMERMILL UNLOCKS THE SECRETS OF THESE WOODS TO BRING YOU MORE PRINTABLE, MORE SALABLE PAPERS

*Watch these magazines
for news that will make
papermaking history*

LATER THIS MONTH, Hammermill will bring printing buyers news of what is probably the most important development in fine papermaking since Hammermill introduced to America fine paper made entirely from softwood cellulose. A big, two-page announcement advertisement will tell the story to a potential audience of nearly 25 million magazine readers. Watch for it in the September 29 *Saturday Evening Post* and *Business Week* and the October 1 *Time* and *Newsweek*.

In the comparison photograph you can see the clearer, more attractive formation now available in Hammermill Bond and other Hammermill papers. The two-page advertisement will tell how Hammermill has unlocked the secrets of the woods shown above to give new Hammermill papers a smoother, more velvety surface for printing, typing, writing and carbon copies . . . a more level surface, greater opacity and greater bulk.



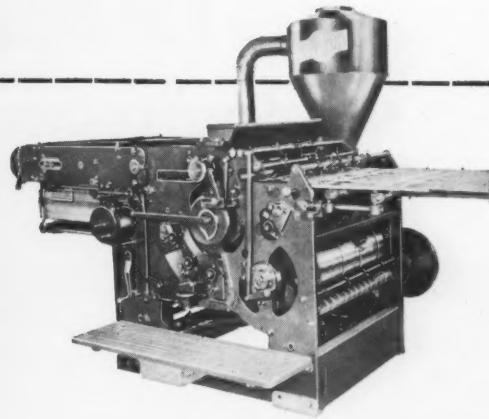
With this exclusive development in the manufacture of fine papers, Hammermill takes a \$6,000,000 step forward to bring you papers that will sell better because they 1) print better; 2) type better; 3) look better. Ask your Hammermill salesman to see samples of these better Hammermill papers. See for yourself why, now more than ever, your customers will know you mean quality when you say, "Let's put this job on Hammermill." Hammermill Paper Company, Erie, Pennsylvania.

HAMMERMILL
Papers

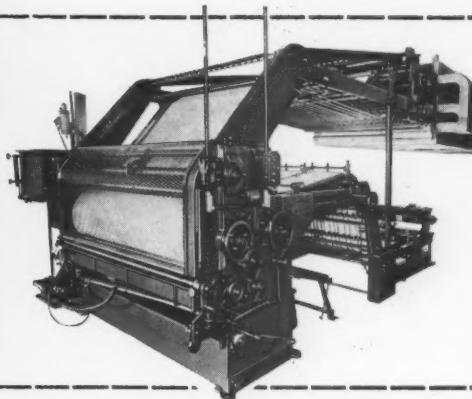
Christensen Profitmakers!

Machinery, built to do
more jobs... better!

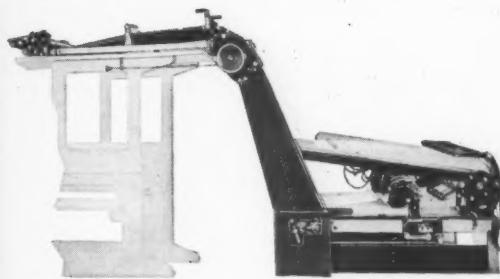
BRONZING Equipment will bring new jobs into your shop . . . and a Christensen High-Speed Bronzer attached to your press will mean increased profit with low operating costs. Matches the practical running speed of your press . . . exhauster-reclaimer keeps bronze out of the press room and in the machine.



VARNISHING of labels, magazine covers, circulars and gift wrappings enhances both product appearance and profits. The Christensen Varnishing Machine operates at almost twice the speed of any other present varnisher. Dual-level oven decreases floor space required. The Christensen will handle paper or board in widths up to 78 inches.



STREAM FEEDING with the Christensen Continuous Feeder means no stopping of the press . . . more printed sheets per hour. Improved register because sheets arrive at register position at one-sixth the speed of sheet-by-sheet feeders. Floor loading reduces operator fatigue, reduces loading time, eliminates stairs and platforms.



DEXTER FOLDER COMPANY

General Sales Office

330 West 42nd Street New York 36, N. Y.

ILLUSTRATED CIRCULARS ARE AVAILABLE
FOR ANY OF THE ABOVE MACHINES



NOW YOU CAN FURNISH ACTUAL PRESS PROOFS

FULLY AUTOMATIC DAMPENING & INKING of the
PRESS ENABLES YOU to OFFER YOUR CUSTOMERS



in sizes to fit every need

Type	Plate Size	Length	Width	Net. Wt.	Gross Wt.
1 C	17" x 22"	10' 6"	4' 3"	4,190	4,840
2 C	25" x 36"	12' 2"	5' 3"	6,250	7,705
3 C	32" x 45"	14' 3"	5' 11"	9,250	11,150
4 C	36" x 50"	17' 5"	7' 10"	13,230	15,430
5 C	40" x 56"	18' 5"	8' 2"	14,180	16,420

THE CONSOLIDATED MAILANDER OFFSET FAST ENOUGH FOR PROFITABLE PRESS RUNS!

Precision engineered for high quality proofing that can duplicate actual press conditions, these presses, with automatic inking and dampening, are very practical for short commercial runs on paper, wood,

metal sheets, glass, plastic and other materials. For complete versatility, ease of operation, economy and efficiency in the shop, the Consolidated Mailander is, invariably, the choice of proofing experts.

GET YOUR CUSTOMERS WITH PROOFS OF ALL OFFSET PLATES !

of the **CONSOLIDATED - MAILANDER OFFSET PROOF -**
CUSTOMERS THIS OUTSTANDING COMPETITIVE ADVANTAGE !

Type "C"
automatic inking
and dampening



Now it is possible to offer your customers accurate press proofs with every plate job. This new, revolutionary proof press is equipped with fully automatic dampeners, inking rollers, and wash unit. It is so efficient that an offset plate can be locked up, registered and proofed, all in a matter of a few minutes. Several minutes more is all that is required for wash-up time, and a second, third, fourth or more, colors can be proofed in an amazingly short time . . . at an amazingly low cost.

THREE BIG, NEW ADVANTAGES for your customer !

1. A sparkling color press proof, printed on YOUR CUSTOMER'S paper with HIS ink, exactly as if it had come from the production press. An "O.K." can now really mean "O.K."
2. An offset plate that your customer KNOWS is right. No more expensive DOWN time with presses waiting for remakes, no more exasperating attempts to register plates that won't register and flaws that pop up between the camera and printing plate.
3. Furnish your customer his first production run of sample proofs — 50 — 100 — 250 copies. They are economical and practical to run. Save expensive makeready and press time so that pressroom can schedule their work for production only, and not hold presses open while proofing. It's low cost insurance to furnish color proofs under actual press conditions with every plate job.

Have it proofed on a Consolidated Mailander
Automatic Proof Press

PROOFING PRESS...the world's finest

Also Available in Hand-Model Type A and Power-Cylinder Type B

CONSOLIDATED International Equipment and Supply Company

GENERAL OFFICES AND PLANT:

1112 NORTH HOMAN AVENUE, CHICAGO 51, ILLINOIS

BRANCH OFFICES: 330 WEST 26th STREET NEW YORK 1, NEW YORK

1190 BENNINGTON STREET EAST BOSTON 28, MASSACHUSETTS

1220 MAPLE AVENUE LOS ANGELES 15, CALIFORNIA



simple formula for satisfying your chemical needs...

**YOU'LL FIND
LITH-KEM-KO
DEALERS
EVERYWHERE**

Yes, in almost every important city in the United States and Canada, there's a LITH-KEM-KO dealer ready to serve you quickly and efficiently with all the fine chemicals produced under the LITH-KEM-KO label. There's a dealer near you — look at the list below — you'll need look no further for the best in lithographic chemicals.

AKRON, OHIO
Metzger Photo Supply Co. 1091 So. Main St.
ALBUQUERQUE, N. MEX.
Jones Graphic Products Co. 320 Broadway S.E.
ATLANTA, GEORGIA
Southern Graphic Art Supply Co.
AUSTIN, TEXAS
Graphic Studios 196 Alexander St. N.W.
BALTIMORE, MD.
Interchemical Corp. 210 W. 19th St.
Roberts & Porter, Inc. 720 E. Pratt St.
5 So. Gay St.
BATON ROUGE, LA.
Southern Litho Plate & Graining Co.
3755 Plank Road
BOSTON, MASS.
Bridgeport Eng. Supply Co. 287 Atlantic Ave.
Roberts & Porter, Inc. 88 Broad St.
W. Oliver Tripp Co. 222 Columbus Ave.
BUFFALO, N. Y.
Interchemical Corp. 77 Dingsen St.
CAMBRIDGE, MASS.
Interchemical Corp. 175 Albany St.
CHARLOTTE, N. CAR.
George R. Miller Co. 208 W. Griffith St.
CHICAGO, ILL.
Bridgeport Eng. Supply Co., 900 N. Franklin St.
Sun Supply Co. 1215 W. Washington Blvd.
Interchemical Corp. 161 W. Harrison St.
Norman-Willett Graphic Supply Co.
318 W. Washington St.
555 W. Adams St.
Roberts & Porter, Inc. 1601 S. Paulina St.
CINCINNATI, OHIO
Sun Supply Co.
Interchemical Corp.
McKinley Litho Supply Co. 1623-39 John St.
229 East Sixth St.
Roberts & Porter, Inc. 1600 Chester Ave.
Bridgeport Eng. Supply Co. 1051 Power Ave.
Capitol Printing Ink Co. 2372 W. 7th St.
Roberts & Porter, Inc. 1825 East 18th St.
Sun Supply Co. 310 Lakeside Ave.
Interchemical Corp. 1325 W. 73 St.
COLUMBUS, OHIO
Yaeger Offset Supply Co., Inc. 162 North Sixth St.
DALLAS, TEXAS
Chemco Photoproducts 2024 Main St.
Interchemical Corp. 1501 Turtle Creek Blvd.
Litho Offset Supply Co. 1122 Jackson St.
Lone Star Litho Supply Co. 2808 Elm St.
Offset Plate Graining Co. 1601 Browder St.
DENVER, COLO.
A. E. Heinsohn 1443 Blake St.
DES MOINES, IOWA
Capitol Printing Ink Co. 821 Third St.
DETROIT, MICH.
Alco Ink & Supply Co. 925 E. Woodward St.
Interchemical Corp. 222 W. Larned St.
Roberts & Porter, Inc. 1025 Brush St.

FORT WORTH, TEXAS
General Ptg. Ink. 2506-10 Tillary St.
HAVANA, CUBA
National Paper & Type Co. of Cuba, S.A.
Calzada del Cerro 1254
Cuban Litho Supply Co. Box 3401
HONOLULU, T. H.
California Ink Company, Inc. 235 Cook St.
HOUSTON, TEXAS
Hi-Speed Litho Supply Co. 2723 Yale St.
INDIANAPOLIS, IND.
H. Lieber Co., Inc. 440 N. Capitol Ave.
KANSAS CITY, MO.
Acc. Composition Supply Co. 921 W. 27th St.
Cornell & Everett 714 Baltimore Ave.
Roberts & Porter, Inc. 1434 Wyandotte St.
LITTLE ROCK, ARK.
Southern Litho Supply 3000 Lewis St.
LONG ISLAND CITY, N. Y.
10th St. & 44th Ave.
LOS ANGELES, CALIF.
Barker Products 1333 S. Main St.
California Ink Company 2939 E. Pico Blvd.
Roberts & Porter, Inc. 344 N. Vermont Ave.
General Ptg. Ink 2458 Hunter St.
Walter W. Lawrence, Inc. 4222 W. Pico Blvd.
MEXICO D. F., MEXICO
Cia Nacional de Maquinaria Grafica S.A. de C.V.
Bolivar 235-237
MIAMI, FLA.
Metzger Photo Supply Co. 2730 N.W. 2nd Ave.
MILWAUKEE, WISC.
Interchemical Corp. 105 E. Melvina St.
MINNEAPOLIS, MINN.
Automatic Litho Supply 1401 S. 3rd St.
T. K. Gray, Inc. 108½ Hennepin Ave.
Litho Supply Depot 729 S. 4th St.
MONTREAL, Quebec, Canada
Canada Printing Ink Co., Ltd. 808 Jeanne Mance St.
Canadian Fine Color Co., Ltd. 905 Old Orchard Ave.
NASHVILLE, TENN.
Interchemical Corp. 801 McGavock St.
Southeastern Printing Ink, Inc. 1307 Division St.
NEENAH, WISC.
Interchemical Corp. 318 First St.
NEW ORLEANS, LA.
Chemco Photoproducts 534 Natchez St.
NEW YORK CITY, N. Y.
Bridgeport Eng. Supply Co. 525 W. 33rd St.
Interchemical Corp. 636 E. 11th Ave.
Alfred E. Metzger 30 Irving Place
Roberts & Porter, Inc. 622-626 Greenwich St.
J. H. & G. B. Siebold, Inc. 150 Varick St.
NORWOOD, MASS.
General Printing Ink 601 Pleasant St.
OKLAHOMA CITY, OKLA.
Interstate Litho Plate Graining Co. 615 N. Eastern

PHILADELPHIA, PA.
C. A. Edwards, Jr., Inc. 1934 Arch St.
Sun Supply Co. 29 N. Sixth St.
Interchemical Corp.
New Market St. & Germantown Ave.
Phillips & Jacobs 622 Race St.
Roberts & Porter, Inc. 1205 Hamilton St.
PORTLAND, ORE.
California Ink Company 1206 N. W. Hoyt St.
PHOENIX, ARIZ.
California Ink Co. 809 N. 21st Street
ROCHESTER, N. Y.
Interchemical Corp.
ST. LOUIS, MO.
Rismanco Graphic Arts Supply Co. 2714-16 Pestalozzi St.
SARASOTA, FLA.
The Dryco Co. of Fla. Sarasota-Bradenton Airport
SALT LAKE CITY, UTAH
California Ink Company 60 S. Second East St.
SAN ANTONIO, TEXAS
Texas Type Foundry 230 N. Medina St.
SAN FRANCISCO, CALIF.
California Ink Company 545 Sansome St.
Roberts & Porter, Inc. 1185 Howard St.
General Ptg. Ink 1425 Folsom St.
SEATTLE, WASH.
California Ink Co. 1727 S. Alaskan Way
SYRACUSE, N. Y.
Interchemical Corp.
TACUACO, D.F., MEXICO
Fuchs & Lang de Mexico, S.A. de C.V.
Esquina Morelano Escobedo y Mar Adriatico 66
TORONTO, Ontario, Canada
Canada Printing Ink Co., Ltd. 15 Duncan St.
Canadian Fine Color Co., Ltd. P. O. Box 82 Postal Station D
TULSA, OKLA.
Britco Supply Co.
VANCOUVER, B. C., Canada
Canada Printing Ink Co., Ltd. 310 E. 4th St.
WASHINGTON, D. C.
Capitol Printing Ink Co., Inc. 822 Homer St.
Interchemical Corp. 806 Channing Place, N. E.
Phototechnical Laboratories, Inc. 132 "Q" St., N. E.
1812 DeSales Row, N.W.
WINNIPEG, Manitoba, Canada
Canada Printing Ink Co., Ltd. 440 Margrave St.
LITH-KEM-KO REPRESENTATIVES
Mr. Don Grant 1140 Ontario St., Oak Park, Illinois
Mr. Albert R. Materazzi 9604 Avenel Rd., Silver Springs, Md.
Mr. Raymond A. Frost 1506 Santa Fe Ave., Los Angeles, Calif.
Mr. Charles Wilharm 1213 Glenwood Drive, Irving, Texas
Mr. John B. Oliver 2147—46th Ave., San Francisco, Calif.
Mr. Win. Stanley Collier 1436 S. Highland Ave., Berwyn, Ill.

**LITHO CHEMICAL
& SUPPLY CO., INC.**
46 HARRIET PLACE
LYNBOURG, NEW YORK
PRECISION
UNIFORMITY
USED AROUND THE WORLD

here today, gone tomorrow... BUT NOT THE PRINTED WORD

Forty centuries of man's accumulated wisdom. Always available for guidance, through the printed word... the lasting guarantee of America's learning and liberty!

INTERNATIONAL PAPER



IP

TICONDEROGA OFFSET



Keep today... print tomorrow... don't wait till tomorrow when
you've paid all your expenses. Print quickly by offset,
through the printed word - the fastest producer of America's printing and money.

INTERNATIONAL PAPER

*Other fine quality Mill Brand
printing papers by International*

Press performance and fine appearance have always characterized Ticonderoga Offset, favorite with lithographers and paper buyers. Now in a new improved blue-white to further enhance faithful reproduction, Ticonderoga Offset gives plus value . . . at low cost. In standard sizes and five weights, sold by leading paper merchants. Six fancy finishes to order.

ADIRONDACK BOND
ADIRONDACK LEDGER
BEESWING MANIFOLD
INTERNATIONAL DUPLICATOR PAPER
INTERNATIONAL MIMEO SCRIPT
INTERNATIONAL TI-OFAKE
INTERNATIONAL OFFSET
SPRINGHILL INDEX
SPRINGHILL COLORED INDEX
SPRINGHILL POST CARD
SPRINGHILL WHITE and MANILA TAG
SPRINGHILL VELLUM-BRISTOL
TICONDEROGA BOOK
TICONDEROGA TEXT
TICONDEROGA TEXT, Coverweight
LOUISIANA COLORED TAG
OTIS BRISTOL
HUDSON GLOSS
HUDSON BOOK
HUDSON COVER, C1S
HUDSON LABEL, C1S
HUDSON LITHO, C1S
CHAMPLAIN COVER, C1S
CHAMPLAIN LABEL, C1S
CHAMPLAIN LITHO, C1S
EMPIRE BOOK
WINN BOOK also CONVERTING PAPERS

This insert is printed by offset lithography
on Ticonderoga Offset, Basis 80.

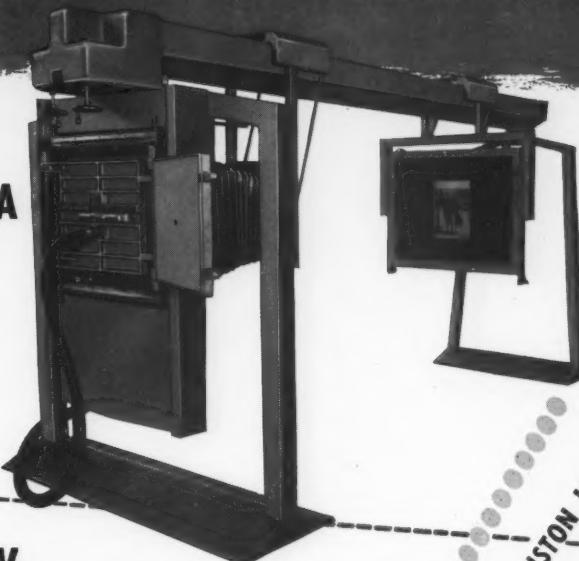
International Paper COMPANY
FINE PAPER AND BLEACHED BOARD DIVISION
220 East 42nd Street, New York 17, N.Y.

the NEW LOOK at Lanston!

NOW the NEW Lanston
Camerama OVERHEAD CAMERA

An economical, overhead camera, ruggedly constructed and easily operated. It features darkroom control, film capacity 4 x 5 to 18 x 22 inches; zoned type vacuum back; shock mounting to prevent vibration. Easily installed without rigging. Overall length 15' 9", height 7' 6".

Now you may have a Lanston Camera at modest cost, built to handle almost any job with economy, speed and accuracy.



and the NEW
PLATE COATING MACHINE

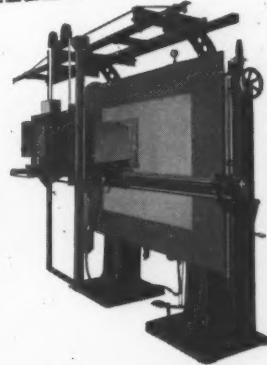
A Vertical Plate Coating Machine employing a radically new air drying system, thermostatically controlled; a new, completely enclosed, variable speed driving unit, controlled by tachometer; a new, efficient means of mounting and clamping plates. Easy to operate. Ruggedly constructed. Available in 3 sizes.



M-H Overhead, Color Precision Camera
Designed, constructed and equipped for the most exacting performance required by the offset shop of today...or tomorrow.



Magnastep Step and Repeat Machine
An economical machine to take care of single color step and repeat needs. Fast, efficient, easy to operate.



M-H Vertical Step and Repeat Machine
Insures close precision in registering negatives for single- and multi-color process work in offset and gravure plate making.

for a NEW LOOK
at Lanston —

Visit Booths 9, 10 and 11
NAPL Convention
New York Sept. 19-24

We will gladly send portfolio sheets giving complete information on the Lanston equipment shown above.

Type set in faces of Monotype 20th Century and Century Schoolbook



Lanston monotype machine company

24TH AND LOCUST STS., PHILADELPHIA 3, PA.
BRANCH OFFICES: 80 Federal St., Boston 10, Mass. • 216 West Jackson Blvd., Chicago 6, Ill.
Room 332, Healey Bldg., 57 Forsyth St., Atlanta 3, Ga. • 441 Lexington Ave., New York 17, N.Y.
115 New Montgomery St., San Francisco, Calif.

IN CANADA: Monotype Company of Canada, Ltd., 77 York St., Toronto 1, Ontario
ALSO REPRESENTED BY: Roberts & Porter, Inc., 622 Greenwich St., New York 14, N.Y.
A. E. Heinsohn, Inc., 1443 Blake St., Denver, Colorado.

LANSTON MONOTYPE MACHINE CO., DEPT. ML
24th and Locust Sts., Philadelphia 3, Pa.

Gentlemen: Please send information on following Lanston equipment:

Camerama Camera Plate Coating Machine M-H Camera Magnastep M-H Step and Repeat Machine

Name _____

Firm Name _____

Address _____

City _____

State _____

JOIN THE FAMOUS LANSTON LINE
OF OFFSET EQUIPMENT

NEW BRILLIANCE WITH



LITHOGEM*

*IPI's HIGH COLOR-STRENGTH OFFSET LITHO INK

New IPI Lithogem colors are first choice with leading litho plants all over the world. These colors really sparkle, are just as brilliant when dry as when wet . . . and they stay press-ready and uniform in body and tack until used.

Lithogem inks are more foolproof on the press . . . set faster with excellent binding qualities. And they hate water, reduce greasing problems to a minimum to make colors stay cleaner, stronger.

Compare Lithogem with the best regular and process colors you are now using. Ask your IPI representative about Lithogem.

COMPLETE INK SERVICE FOR LITHOGRAPHERS

Lithographic plants of all sizes are invited to use IPI's complete ink service facilities in litho centers from coast to coast. Each local IPI service station and branch is staffed by local experienced ink men, well-seasoned in the special lithographic problems—large and small—of each locality. They are always on call to help you. For prompt ink service with a personal touch, contact IPI. Rely on IPI for leadership in ink research.

AMERICAN INDIAN ART

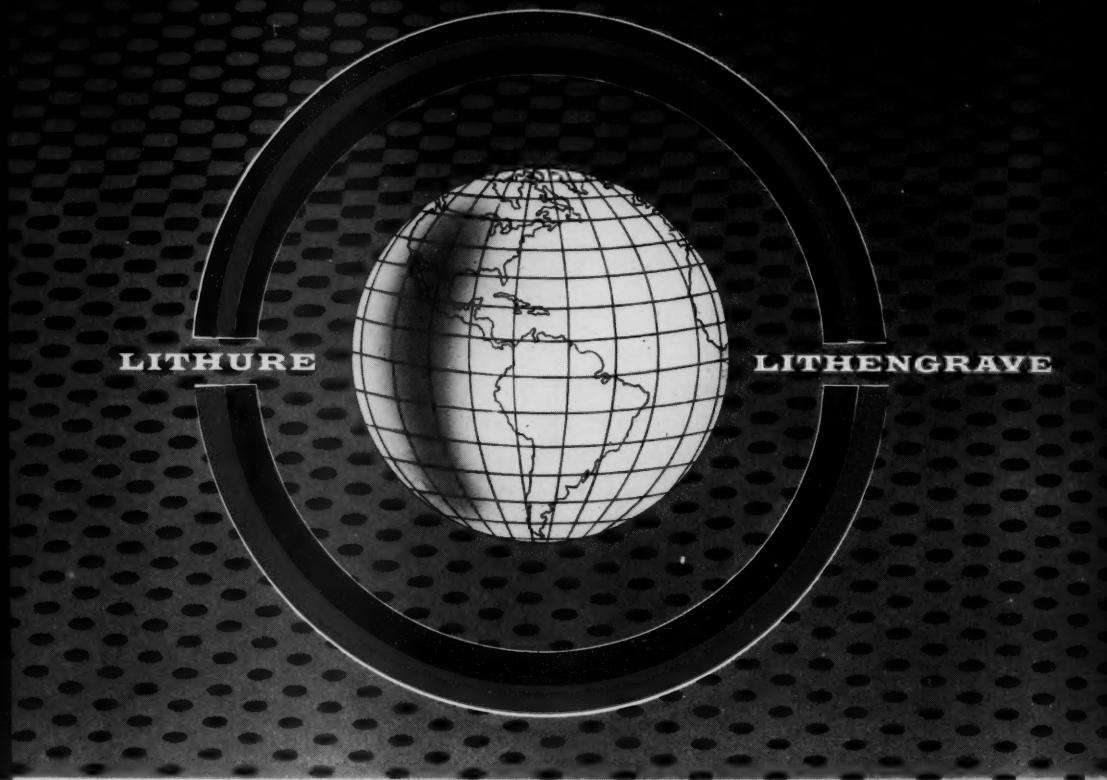
An example of the great revival of American Indian Art, during the dynamic Mississippi Valley period, is shown at left in IPI Lithogem colors. This Indian culture, which flourished from the 10th to 17th centuries, is based largely on the Mexican pattern. The towns were Mexican-inspired in their structure and layout; the arts leaned heavily for inspiration on the so-called Mexican "death cults," with strong emphasis on death symbols to decorate their remarkable pottery and spectacular stone-carvings. The figures on the stone-carving seen here are two intertwined rattlesnakes, probably to symbolize a death all too common in those perilous times.

IPI, IC and Lithogem are trademarks of Interchemical Corporation



Interchemical
CORPORATION

PRINTING INK DIVISION • 67 W. 44th ST., N.Y.C.



Here are hard-metal, offset plates engineered to meet even your toughest production demands

When you use Lithure or Lithengrave offset plates—and you should be using them if you have three or more presses 17 x 22—you can depend on getting finer quality reproductions, greater overall plant efficiency and a substantially increased profit margin.

PDI assures you of these benefits by sending an engineer right into your plant during an initial evaluation period. He works directly with your supervisory people to develop procedures and with your production team to introduce new operating techniques.

And—as a result of his engineering counsel—you and your production group get from Lithure for positives—or Lithengrave for negatives . . .

- *Accurate tone reproduction*
- *Over 10% savings in number of plates used*

- *Faster make-ready and faster get-aways in printing color jobs*
- *Standardized press room operation—increased productivity up to 20%*
- *Color uniformity in original press runs and reprints*
- *Savings of up to 20% in ink—reduction in paper spoilage of 8%*
- *Indefinite shelf-life and storage for reruns.*

If you want a constant factor that will eliminate most of the endless variables in your operation—then you want Lithure or Lithengrave, the plates that do the job right, the first time and every time.

Lithure and Lithengrave were developed in TIME and LIFE's Springdale Research Laboratories. For more information about these plates, write to:



Printing Developments Inc. ● 9 Rockefeller Plaza ● New York 20, N. Y.



Baker's (count 'em) Dozen!

You're looking at HOWARD's famous "dozen." Twelve topping colors *plus* whitest white. Thirteen wonderful ways to brighten up business printing of all kinds.

Business forms, for example. They're crisp and clear on any one of these clean HOWARD BOND colors.

HOWARD PAPER MILLS, INC.

Color identifies at a glance for faster handling, routing and filing.

Other good examples? Catalogs, price lists and the like. Put them on HOWARD BOND and get two-color effect at one-color printing cost. Or take this tip from the thousands who've tried it: put your

letterhead on HOWARD colors, too.

Samples show HOWARD's "dozen" much better than cupcakes. If you'd like to see them, your printer or paper merchant will come when you call.

PRINTERS! This message appears in advertising magazines read by your customers.

• HOWARD PAPER COMPANY DIVISION, URBANA, OHIO

Howard Bond

"The Nation's

Business Paper"

Companion Lines: Howard Ledger • Howard Mimeograph

Howard Writing • Howard Posting Ledger

Printed on Maxwell Offset



Basis 80—Wove finish



Doesn't color reproduce better on Maxwell Offset?

Howard Paper Mills, Inc. / MAXWELL PAPER COMPANY DIVISION / Franklin, Ohio

COLOR PHOTOGRAPH BY ANTON BRUEHL

We'd be pleased to send you samples
of our seven finishes and two tints

Printed on Maxwell Offset—Basis 80—Wove finish

Letters to the Editor

Request from Ireland

Dear Sir:

I hope you will be able to send me a copy of "Photography and Platemaking for the Photo-Lithographer," by I. H. Sayre. The price is \$6.75. Perhaps you don't know but American dollars are very hard to get here in Ireland and after a great deal of trouble I succeeded in getting a \$10 bill which I enclose.

If you have some other book regarding camera work that I could find useful, would you be good enough to send it to me with the remainder of my money?

Michael O'Leary,
Beechwood Park,
County, Cork, Ireland

Irene Sayre's book is out of print. However, we have sent Mr. O'Leary \$10 worth of LTF texts on photography and platemaking, covering all phases of the subject.—Editor.

NALC Editorial

Dear Sir:

Yesterday I had a chance to read the June issue of *Modern Lithography* and it was more than a pleasure to read the excellent editorial on NALC problems.

It truly presented the problems discussed in our convention at Baltimore.

Still, this wasn't the important part of your fine editorial. The constructive suggestions for strengthening the NALC are more than welcome, and they shall be explored.

It is my hope that this year will find us a little closer to some of the goals that the founders of the NALC had when they put so much of their time and energy into this club.

As the elected president of the NALC, I want to extend not only my personal thanks, but the thanks of all the members of the NALC for that editorial and the past courtesies you have shown us both nationally and locally. If I can ever be of any assistance to you, feel free to call on me.

R. Walter Blattenberger
President, NALC
St. Louis

Dear Sir:

It was certainly gratifying to read the editorial in the June issue of *Modern Lithography*. It shows true reporting on the part of your cohorts, also the continued interest that your organization has shown in the NALC. I also wish to state that you have always been one of our strongest supporters.

As an officer of the NALC, I wish to thank you for the splendid cooperation that you have always given us. We will work

towards your suggestions on strengthening the NALC.

If I can be of any assistance to your organization, please feel free to contact me.

Many thanks and kindest regards,

Sol D'Alessandro
1st V.P. NALC
Cleveland

Dear Sir:

May I express the thanks of the National Association of Litho Clubs, and the grateful appreciation of its member clubs, to your publication and its staff, for your generous and sympathetic handling of the news and in the dissemination of educational material during the past year.

Eugene J. Hanson Jr.
executive secretary, NALC
St. Louis

Robins Booklet Scored

Dear Sir:

I have just read your article in the June issue of *Modern Lithography* under the heading "An Open Letter to I. D. Robins." As a staunch proponent of letterpress with 40 years behind me in the manufacture of letterpress plates, permit me to be one of the first to congratulate you on taking Mr. Robins to task.

When Mr. Robins' survey was first released I was probably as shocked as you, but probably from an entirely different reaction. While I recognize easily as you have that Mr. Robins permitted some bias to enter his conclusions, my objection to the publication was based on the fact that it would serve only as an anesthetic to the letterpress industry, lulling their minds into a false sense of security and blinding them to the crying need for progress and modernization.

While this letter is not intended to promote the stock of lithography (I am still letterpress one-hundred percent), I am still, as one letterpress man, damn sorry Robin's article ever reached publication.

Ben Preston
Crescent Engraving Company
Kalamazoo, Mich.

Job Descriptions

Dear Sir:

We make available to several thousand high school career counselors, a Chronicle Guidance Service.

An important part of this service consists of reprints of articles of career significance taken from trade, technical, business and professional magazines.

In reviewing the first six issues of 1956 of *Modern Lithography*, we came across an excellent article entitled, "Job Descriptions

for Lithography" contained in the April 1956 issue.

We would like very much to reprint this article and make it available to users.

If we have your permission to reprint this article, could we secure two copies of it for this purpose?

Any consideration you can give this request will be appreciated not only by us but by the many youths who are interested in reading something about the job of the lithographer.

Raymond M. Handville
Chronicle Guidance Publications
Moravia, N. Y.

Two copies have been sent, and permission to reprint is gladly given—Editor.

Likes Reprints

Dear Sir:

Today we received your reprints on pre-sensitized plates and offset press specifications.

We were so impressed with the articles that we would like to request 15 additional copies of each.

We hope these will be available to us and again, we wish to thank you for your co-operation.

D. J. Bumgardner
Minnesota Mining & Mfg. Co.
St. Paul, Minn.

Fountain Dryers

Dear Sir:

Engaged in lithographing folded cartons as we are, we find ourselves using all types of cardboard stock. This creates an ink drying problem that we cannot blame entirely on the ink.

However, I find that by using some of the patented brands of water fountain drier stimulants we can almost eliminate our problem.

Is it possible at this time to furnish me with information on the type chemicals used in concocting those formulas?

Irwin J. Tomlington
Ace Carton Corp.
Puebla, Cal.

It is impossible for us to obtain the formula of water fountain drier stimulants. I would suggest that you contact your ink supplier for information of this sort. According to several technical men, you would be ill advised to try to devise a mixture of your own. They think the best to use are the standard commercial products.—Editor.

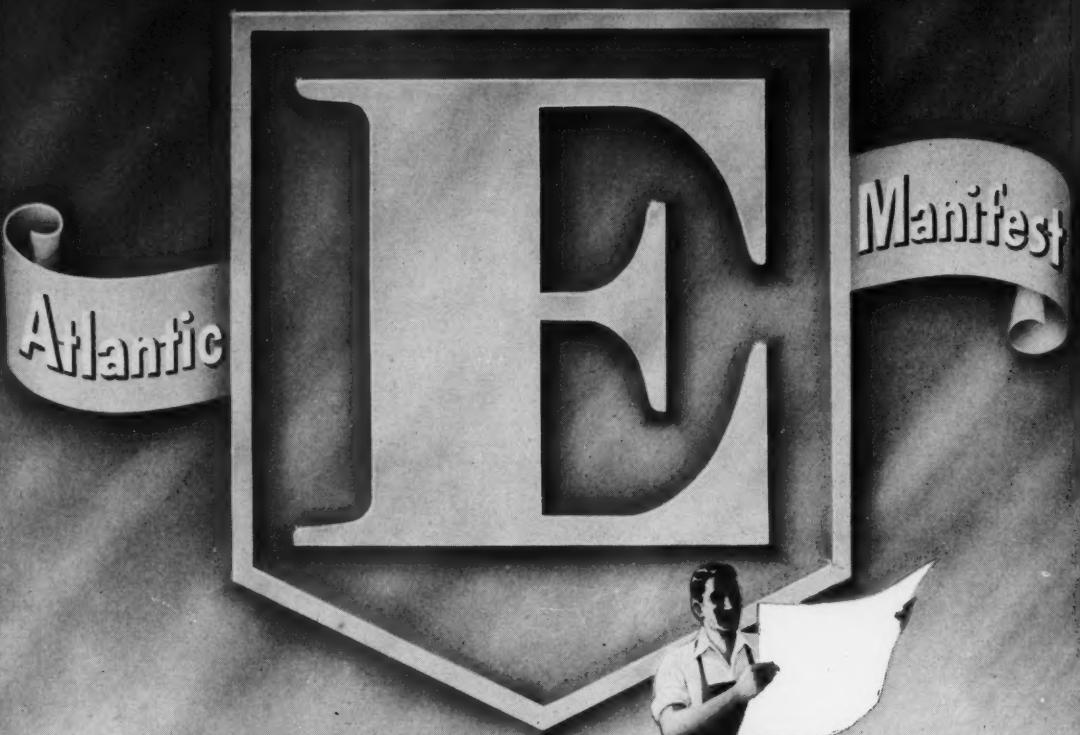
Welch Densichron

Dear Sir:

In reading the article in the July issue by Dr. Raymond Schwalm, What's New in Litho? we were particularly interested in the paragraph on densitometry, in which the Welch Densichron was mentioned.

Could you give us the name of the man—*(Continued on Page 171)*

E A S T E R N



EXCELLENCE IN FINE PAPERS

This symbol of the Eastern Corporation is your guarantee of excellence. Backed by a proud heritage founded on generations of paper making—it signifies the excellence in quality of *Atlantic* and *Manifest* business papers. This has made *Atlantic* first in sales of all genuinely watermarked bonds... and *Manifest* the leader in economy bonds.



Atlantic Papers

PRODUCTS OF EASTERN CORPORATION, BANGOR, MAINE • MANUFACTURERS OF QUALITY PAPER AND PULP MILLS AT BANGOR AND LINCOLN, MAINE • SALES OFFICES: NEW YORK, BOSTON, PHILADELPHIA, CHICAGO AND ATLANTA

Editorials

Mr. Baum Goes to Washington

A FEW years back, the movies were full of stories like "Mr. Smith Goes To Washington," in which average citizens stood up in Congress and demanded (and got) legislation to benefit the average man on the street.

Those films, if memory serves, were highly dramatic, entertaining — and pleasantly implausible. Or so we thought, anyway, until Russell Ernest Baum went into action a few months ago with a one-man crusade against the raising of first class postal rates from three to four cents.

When Congress adjourned until January, the three-cent stamp was left inviolate, at least for another year.

In looking back at the situation, it appears that Mr. Baum's forceful presentation before the Congressional committee considering the postal rate hike must have been a strong deterrent to the bill. (One other deterrent, of course, was the fact that 1956 is an election year.)

Mr. Baum, who is president of Russell Ernest Baum, Inc., manufacturers of folders for graphic arts firms, was most resourceful in making his presentation. He sent out 40,000 double post cards to bookbinders, printers and other users and printers of direct mail advertising and got thousands of replies, virtually all in support of his stand.

Mr. Baum's plea was not for personal interests. He told the committee he is 70 years old and is thinking only of the younger men who are starting out in business and relying heavily on direct mail advertising to stimulate business.

"My plea is not for myself . . . I care not a whit . . . at my age . . . for myself, but I know, when I started business, what every extra penny's outlay

meant and I am thinking solely of countless young men, who, today and tomorrow, have the imagination and the "guts" to go into business on a shoestring. I feel that if someone planned an obstruction to the little man starting in business, that no more definite thing could be done to hamper him, than to have his postage increased, because direct mail is the only method of advertising his limited resources make available."

Mr. Baum's campaign looks like it may prove to be one of the most successful in this year of so many campaigns.

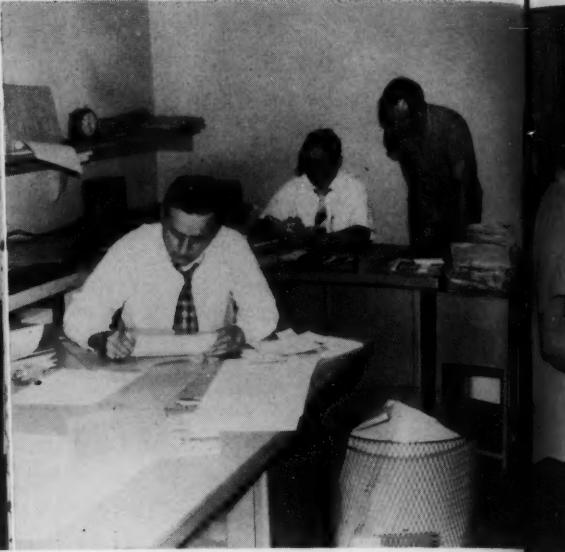
New Product Coverage

LITHOGRAPHERS are interested in new products that can be used in their shops—they apparently can't get their fill of information about new presses, new plates, new attachments and new processes. Our readers have proved that point to us time and again with dozens of letters to the editor, requesting additional information, nearly every time we publish an article about something new or different in lithography.

Time was when we'd cautiously reject the idea of including articles about suppliers' products in our regular feature section. We always thought that sort of thing belonged in the "Equipment, Supplies, Bulletins" department that appears in each month's *ML*. But after observing reader interest in several features about such things as presensitized plates, a new plastic lamination process, and other products, we're convinced that you readers have a keen interest in such information. So, from time to time, in future issues, we will publish more articles designed to keep you up-to-date on what's new and interesting in litho.



Crafton partners . . . Katz, Friedman and Welt.



Estimating and planning the offset job.

CRAFTON GRAPHIC: *Quality Comes First*

THE first question anyone asks one of the officers of Crafton Graphic Company, Inc., is "How do you manage to win all those graphic arts awards year after year?" It's a good question, because Crafton, one of New York's top quality litho houses, has won hundreds of awards in recent years, in competitions sponsored by American Institute of Graphic Arts, Lithographers National Association and the Art Directors Annual. This year, for the sixth consecutive year, the company was awarded more Certificates of Merit in the AIGA's

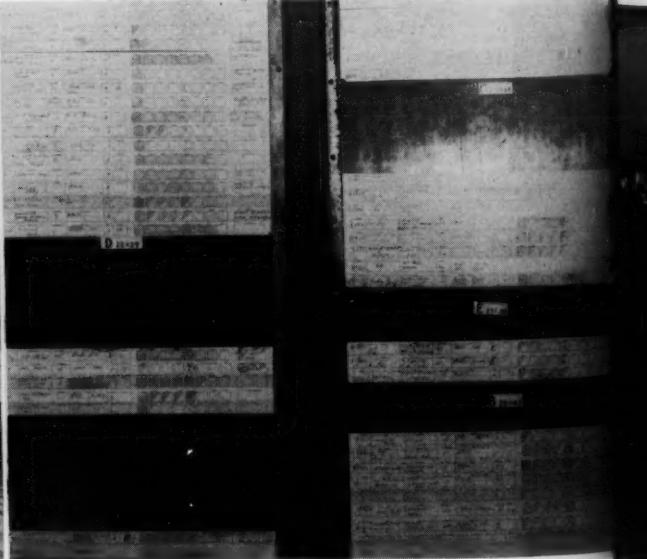
Printing for Commerce Exhibition than any other entrant.

How come? What secret does Crafton use to turn out such a high percentage of prize-winning specimens? The visitor to the Crafton shop finds no clandestine equipment or process being employed. There are no off-limits rooms or other security measures. And there is nothing spectacular about the pressroom, on the fifth floor of the building at 229 West 28th St., in Manhattan. Just a well-ordered setup of six offset presses, ranging from a 17x22" Harris-Seybold single color to a 25x38" Miehle

Tusching the plate to insure top quality.



Production board shows flow of jobs.





New automatic temperature control trough in darkroom.



New down-draft table for preparing plates.

two-color, with the usual complement of photographic and platemaking equipment (no composition or bindery).

Quality Depends On Many Things

"Even a bedroom printer can turn out a quality job," in the opinion of Victor E. Friedman, one of the three partners, and currently president of the firm. Mr. Friedman cautions, however, that a poor lithographer can't turn out quality work consistently. Furthermore, he is convinced that it is not just the lithographic press, nor any other individual piece of equipment that will assure quality.

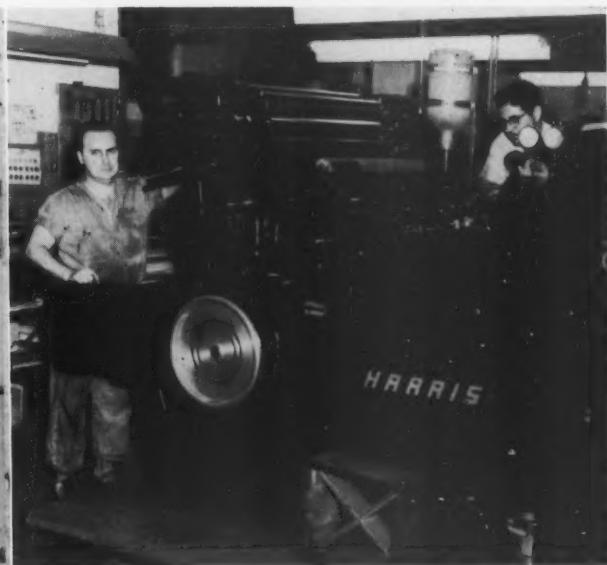
Rather, at least in the Crafton shop, quality is the result of rigid standards that are set up for a job at *every* station in the plant. These standards cover everything

from materials, equipment and lighting to ability of employees. "Bad jobs are rejected all along the line, at the copy, camera, platemaking or press stops, not just at the press. That way our percentage of good jobs is higher than the average," he added.

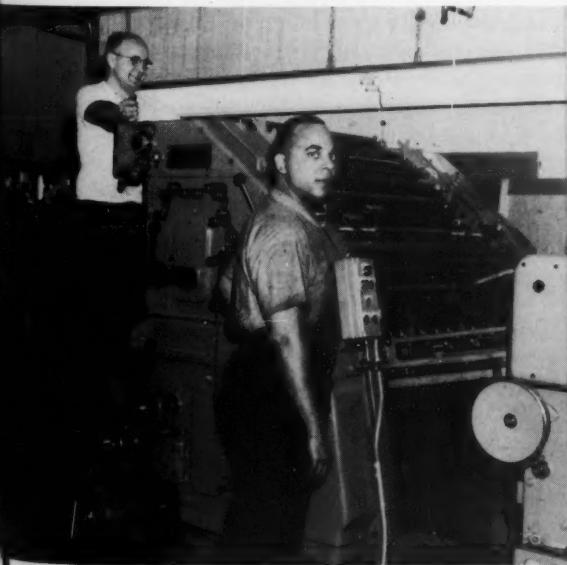
As might be expected, Crafton isn't the lowest priced litho house in the city. The firm has realistic prices that are compatible with the high quality of work that the shop regularly turns out. It isn't a discount house, by any means, and it never tells a complaining customer, "Well you didn't pay much for that job, anyway."

Last year, its twenty-first, Crafton's business got too big for its limited space. Earlier this year Mr. Friedman

New Miehle 25 x 38" two-color press.



And new Harris-Seybold 22 x 29" press.



and his partners, Edward E. Katz and Maurice Welt, gathered up Crafton's dispersed units—occupying one-half of the second and twelfth floors—and consolidated them, one press at a time, on all of the fifth floor and three-fifths of the sixth, with the plant on the lower floor and the offices and shipping department above. The move meant an expansion from 10,000 to 18,000 sq. ft. of floor space. That's when Crafton added the small Harris press and the two-color Miehle. In addition, there are two 28 x 42" Harrises and a 22 x 34" Harris. Other new equipment has been added in the camera and platemaking departments to step up the firm's capacity. A production control board, designed many years ago, keeps track of jobs in process.

No Salesmen, Just Quality

Crafton has prospered with no salesmen and, until several years ago, with very little promotion. The 100 percent litho shop has made its way on quality, relying on repeat accounts that keep business coming into the plant at a regular pace. A high percentage of the new business comes to Crafton after a recommendation from one of the satisfied customers. The shop is medium sized, the entire personnel totaling about 42.

When the Crafton triumvirate sits down to plan each job, the men keep in mind that their customer is buying a job, not a process. Their estimates are figured with quality given first consideration and no attempt is made to cut corners. The customers, advertising agencies and companies looking for high quality on such things as annual reports and brochures, seem to like it that way.

Mr. Katz, recalling the early, struggling days of Crafton Graphic, stressed the point that quality always has been the most important consideration in the plant, even back in the days when the shop's biggest (and only) press was a Multilith. That was in 1934, when Mr. Katz, who had gotten into the graphic arts with Edward Service, a direct mail shop, teamed with Mr. Friedman in a small shop at 61 Whitehall St. Mr. Friedman, a graduate of McGill University, in Montreal, had bought printing for Minneapolis-Honeywell in New York. In 1935 they moved to 35 Pearl St., and Crafton was incorporated, with Mr. Katz's brother, Howard, joining the firm, along with Joseph De Palma. A 17 x 22" Harris press was

added that year, as was a 14 x 20" Webendorfer. Camera and platemaking facilities followed soon after.

In 1946, Mr. Welt, who had come with Crafton in 1937, bought out Mr. De Palma's interests and became a full partner. His background included the fascinating experience of working in 1933, at the tender age of 16, with James Shenkalian, of Powers Photo-Engraving, on what was then a revolutionary masking process. He later served with Kipe Offset as an opaquer and with Knudsen Process as assistant foreman. He joined Crafton as plant superintendent at the age of 20. In 1952, Mr. Welt relinquished his foremanship to Mr. James Pastorelli, and is now actively engaged in selling, but with enough time left to discuss the daily plant schedule and every day problems that might arise.

Crafton made one more move before arriving at 28th St. That was to 130 Cedar St., in 1936. The company remained there until 1941. Four years ago Howard Katz died, reducing the partnership to the present three.

Progressive in more ways than one, Crafton is a member of the Metropolitan Lithographers Association and the National Association of Photo-Lithographers.

Not only is the pressroom well-ordered and efficiently laid out, but so are the offices. They are a handsome example of modernization of a drab building into a smart and efficient layout, and at a modest cost. Each partner directed the redecoration of his own unit.

An intercom system, becoming more and more popular in litho shops around the country, keeps the plant personnel in constant contact, whether in office or shop.

There must be something pleasant about playing a part in production of quality work, for many Crafton employees have been with the company for many years, and three of the pressmen have worked in the shop for more than 15 years.

But this reputation for quality has not made the Crafton partners immodest or complacent. A very well executed piece of self-advertising puts it this way: "Our head is in the clouds . . . because our feet are on the ground." The folder goes on to explain that even though Crafton once again has topped the award winners in the Printing for Commerce Exhibition, it still is keeping its eye on the job and is concerned only with producing fine lithography "to build sales and prestige for our customers."★

One of the top award winners in
the lithographic industry stresses
Quality in every part of the shop.

Pre-Separated Art Techniques

—an approach to low-cost color

By *Herbert P. Paschel*

Author of ML's Photo Clinic

BEFORE it became possible to translate color copy directly into printable images by means of the photographic processes, color reproductions were produced by laborious and time-consuming manual techniques. In chromo-lithography, for example, a colored original was "re-drawn" in many separate images on as many lithographic stones or plates by skilled artists. With technological advances in photography, particularly color sensitive emulsions and halftone screens, and in platemaking, it became possible to apply the tri-color system proposed by Ducos du Hauron to color printing. The photo-engraver and letterpress printer made such rapid strides in developing and exploiting this new method that color printing as practiced by the artist-lithographer gradually fell into disuse and the lithographer too began to use the photomechanical procedures.

Despite the advantage of the three- and four-color photomechanical methods, it soon became apparent that a need existed for a simpler and cheaper system of color reproduction for certain classes of works. The cost of creating color artwork, separating it photographically and then producing a correct set of printing plates, was sufficiently high to limit the process to jobs of exceptionally long runs. Then, as even now, the buyer of short runs could not absorb the high cost of process work. This need led to the development of a host of processes for producing multi-color effects from monotone originals. Since the element of color did not appear until the final printing stage, these meth-

In recent months an increasing number of questions directed to Mr. Paschel's Photo Clinic have been concerned with technical problems connected with reproducing pre-separated art, particularly the Bourges Process. The evident widespread interest in this process prompted the writing of this article. It is, in a sense, a consolidation and expansion of a number of answers to inquiries that were originally scheduled to appear in the column.

ods were called "fake color" or "fake process."

Fake Color Methods

The fake color methods evolved along two distinct lines. One was the shading media technique by means of which a limited number of flat, uniform tones could be produced in each color. By combining the colors in various combinations of tints, a gamut of 60 or more colors is possible. Foremost among these was the Benday process, based on special screens containing, in relief, some pattern of lines, dots, stippling, grains, etc. The raised portion of the screens could be inked up and the ink pattern transferred to relief or litho plates. Although the process was developed initially to replace the tedious hand-work performed in chromo-lithography, again the photo-engraver eventually made the most use of the Benday system.

It was only natural that the Benday idea should be extended to include

art preparation. In its original form the Benday process also was used to apply tints to negatives and positives and, in some cases, to the copy itself. The latter was a risky method — the danger of ruining the copy was a serious consideration. This hazard was overcome when structured patterns became available on thin transparent sheets. By means of shading sheets tints could be incorporated directly in line copy, and for two-color and multi-color work, the shading sheets could be applied in the form of overlays. Present-day techniques are an evolution of the systems introduced by such graphic arts pioneers as Ben Day, Hutchinson, Bourges, Dodge and others. The ultimate development of the shading media technique is exemplified by the drawing boards and films containing a built-in, invisible dot or line pattern. The application of a developing liquid to any point of the board or film renders the image both visible and reproducible.

The structured shading media methods have proved ideal for the type of reproduction where a limited number of flat uniform tones of color are adequate. For this reason they have predominated chiefly in the field of colored comics. Illustrations requiring a full tone and color scale, subtle blendings and gradations obviously could not be realized with any of the aforementioned processes. The second group of fake-color techniques was aimed at achieving a full color and tone scale with all of the subtle blendings and gradations possible in regular process work.

Of these, the simplest procedure

utilizes regular black and white copy — drawings or photographs — from which four different halftones are made. These negatives are retouched (dot-etched, stained, opaqued, etc.), until the required balance and color separation is obtained. The second system is a modification of the first. Instead of halftone negatives, four black and white photographs are made from the original. The prints are retouched to provide the tone values and separation desired and from these prints a set of halftones is made.

Last, but not least, is the overlay system of black and white pre-separated art. A key drawing first is made on conventional board. Matte acetate sheets are attached to the key drawing, one at a time, and the images representing the separated colors are drawn thereon in conventional black and white art media. As many overlays as there are colors needed are produced, the key drawing generally being used for the black plate.

One Common Drawback

All of the methods so far described have one serious drawback in common. Without a colored original, accurately related to the printing images, there is no reference point during the reproduction stages. All operations are based on the assumption that the established values are correct. Nobody, from the client down to the pressman, knows what the job should or will look like until the first proof is pulled. To make a full color original merely as a guide for working from monotone or pre-separated copy would, of course, add considerably to the cost. The lack of a color guide was a major factor in stifling the growth of the fake color methods. Lithographers and clients alike lost interest and faith in the systems, which too often led to disappointment, misunderstanding and unsatisfactory results. Nevertheless, the need persisted for a method that would provide satisfactory color reproductions at less cost than regular process work.

The problem attracted the attention of Albert R. Bourges, a skilled photo-engraver and a pioneer in the shading media techniques. His years of effort in trying to get the printing industry

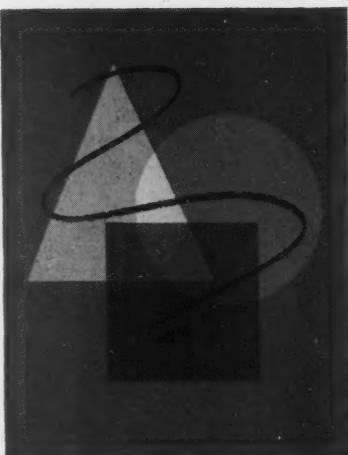


Figure A

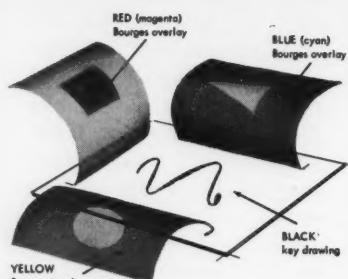


Figure B

Bourges pre-separated art looks like any full color original. (Fig. A) Actually it consists of three transparent colored overlays over a black and white key drawing (line or tone). The overlays are hinged on separate sides (Fig. B) so they can be worked on singly or in any combination. In the reproduction stages each copy element is photographed separately.

to apply standards and controls to color reproduction greatly influenced his approach to the problem and his ultimate achievement. He worked on the premise that a color guide of some sort was essential to the success of any color reproduction system. Since the main purpose of a low-cost system is to eliminate the costly operations of color separation and retouching, he reasoned, pre-separated artwork should be the foundation of a satisfactory process. An additional requirement was that the artwork be accurately reproducible with existing skills, equipment and process inks. After many years of research and experimentation, Albert Bourges created a pre-separated color system which not only offered a means to

greater economy and fidelity in color reproduction, but unexpectedly became accepted as a revolutionary art form.

How Bourges Works

Briefly described, the Bourges® Process operates as follows: A black and white drawing, in line or tone, is made first, using conventional art techniques. With the drawing as a guide, a set of overlays is produced, using Bourges Colotone® sheets in the process colors — yellow, red (magenta), and blue (cyan).* These are plastic sheets containing a layer of solid, uniform color in tint strengths from 10 percent to 100 percent. The color layer is removable by means of a stylus or liquid. The artist selects the tint strength in each color which, for the particular job, he deems best as the starting point. Each of these overlay sheets is hinged to the drawing so that each or all can be superimposed over the drawing. (Figs. A & B.)

The artist then proceeds to remove color from the overlays, one at a time, in all areas where color is not wanted or needed. Color is strengthened by adding it with matched pencils and liquids. Subtle modeling and tonal gradations are achieved either by blending the pencil color, or by airbrushing liquid color. During his creation of this pre-separated artwork, the artist can check the progress of his work, the color mixtures, etc., as he superimposes the overlays. The finished drawing, when all overlays are superimposed, is in full color, and can thus be submitted to the client for his approval. Minor changes, if necessary, easily can be made.

The Bourges Process is not intended to compete with or replace conventional process reproduction of such subjects as natural color photographs (either prints or transparencies), fine art, etc. But in any case where this art form lends itself, the Bourges

* Although we are only discussing the Process colors used in full color reproduction, the Bourges sheets are also available in a complete line of secondary colors for two-color work and special effects.

Process has the following significant advantages:

1. The cost of preparing Bourges pre-separated art is no higher than with other art forms.
2. The tone and color scales of Bourges artwork are accurately reproducible by existing reproduction processes and available inks.
3. Conversion to printing images is possible by means of simple, straightforward photographic and platemaking techniques without the need for color separation, color masking, or manual retouching.
4. The artwork serves as a dependable color guide.

To appreciate these advantages, it might be best to review briefly the fundamentals of process work. Color reproduction, regardless of the process employed, is of necessity dependent upon the mechanism of color perception of the human eye. Our visual perception of color is not due to a critical response to each and every wave length of light reaching our eyes. Instead, our color impressions are obtained by the combined responses to three broad regions of the light spectrum roughly defined as red, green and blue.

Color Sensations

Because of this, all of our color sensations can be stimulated by suitable mixtures of only three colors of light — the aforementioned red, green and blue. This also means that any color reproducing system must satisfy the conditions imposed by the eye and approximate the original in terms of its red, green and blue content. It is indeed fortunate that this is so. If it were otherwise, instead of being able to reproduce color by means of only three suitable colors, as is realized with color films and color television, we would have to use at each point a color which matches exactly the corresponding point in the original. This would involve hundreds if not thousands of separate and distinct colors. Under such requirements color printing would be highly impractical, if not impossible.

The first step in a tri-color repro-

duction process is to analyze, or separate, the original into the component red, green and blue intensities present. In the photo-mechanical systems this is accomplished by recording the red, green and blue values separately, by means of filters, on three photographic plates. The resulting images are no longer colored, but are, instead, black and white densities in negative form and are next converted into printable images (halftones).

The final step is the reconstruction, or printing, at which stage the original red, green and blue values are controlled by inks whose colors are complementary to the primaries. The white paper furnishes the full quota of red, green and blue intensities. The function of the yellow ink is to control the blue intensities; the magenta (red) controls the green densities, while the cyan (blue) controls the red densities. The four-color system, which is more widely used than the three, utilizes an additional image, black, for various practical advantages. It is nevertheless based on the tri-color system. The hue of a green in the original will be reconstructed by appropriate amounts of yellow and cyan ink. The purity of the green color will be influenced by the magenta ink, or the black, or jointly controlled by both the magenta and black in some balanced combination.

To achieve facsimile reproduction in four-color process, several important considerations must be fulfilled. First, the red, green and blue values must be accurately recorded in the separation negatives. Secondly, these records must be accurately converted into halftone printing images. Thirdly, the color images and the black must be precisely balanced. Finally, the ink and paper combination must be capable of reproducing the tone and color gamut of the original. If this last condition is not fulfilled, it will be impossible to achieve facsimile reproduction.

The Bourges Process circumvents all of these exacting conditions. Of greatest significance is the fact that the artwork is pre-separated into the very values and components necessary in the reconstruction (printing) stages. Of equal importance is the

reproducibility of the tone and color scales of Bourges artwork. This is an inherent feature of the process because the tone scale is no greater than that of the printing processes and the colors of the overlays actually are printing inks that can be matched.

The Photographic Operations

Specific instructions for photo-



Figure C

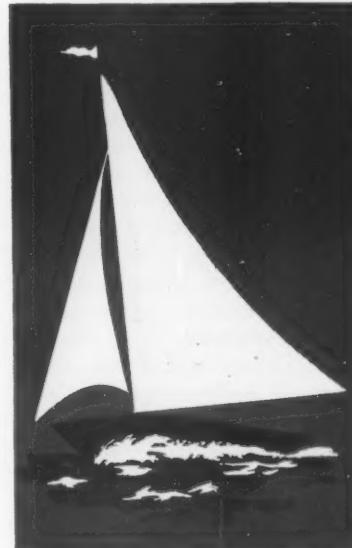


Figure D

With the proper filter-film combination (see charts), the colored overlays photograph the same as regular black and white copy. In Fig. C you see the yellow overlay in the actual color as it would appear to the eye, and in Fig. D as it appears to the camera with a #30 "Rose Bengal" filter.

graphing Bourges copy could prove misleading, especially if the conditions in the plant did not duplicate those on which the instructions are based. Such variables as the intensity level and color temperature of the light source, reproduction characteristics of the optical system, the type and characteristics of the screen used, etc., all can have considerable influence on exposure time, filter factors, halftone technique and the like. A detailed outline of the operating procedures and the basic requirements at each step will prove of greatest help to the cameraman. From this information he can work out the operating techniques that will achieve the desired results under his own shop conditions.

The Bourges Process requires no special equipment or involved photographic techniques. But, in common with all other color systems, it requires accuracy. Color mixture is not a haphazard affair but follows definite physical laws. To achieve a specific color from the mixture of two or more inks, a definite quantity of each ink is required. Since the amounts of ink have already been established in the Bourges copy, all that is necessary is to convert the copy elements into facsimile halftones.

All four elements of Bourges copy are photographed as reflection copy. The transparent colored overlays become reflection copy when backed up with a highly reflective white paper such as Kromekote. When loading the copy in a glass covered copyboard, care must be exercised to insure maximum contact between copy and coverglass. Inadequate pressure may result in misregister or, in the case of the overlays, in distortion of fine detail and shadow effects.

Although filters are used in the Bourges Process, the purpose is entirely different from that of tri-color separation. The sole function of the filters used is to convert each of the colored images (Fig. C), from a photographic standpoint, into black and white images (Fig. D). If, for instance, we use a filter that absorbs the rays reflected by one of the colored overlays, we prevent the reflected light from the colored part of the

copy from reaching the sensitive emulsion. This, in terms of the photographic reaction, is the same as if the tone scale of the copy were neutral instead of colored. For example, the process blue (cyan) overlay photographs the same as black when using a dark yellow filter and Orthochromatic film. The important consideration in photographing the colored overlays is to use a filter and emulsion combination which provides the maximum contrast between the image and the white background.

Color Correction

In conventional process work, color is translated into halftone images in either of two ways. In the direct method, the copy is screened and color separated simultaneously. With the indirect method, a set of continuous tone separations is made first. From these, the final screened images are made. Since it is not easy to obtain ideal separation negatives, some form of color correction inevitably is necessary. Because of this, the indirect method has some advantages over the direct method—the indirect method affords several stages for color correcting and masking. Since Bourges copy already is color-separated, the indirect method offers no advantages. Making screened negatives direct from the copy elements not only is simpler, but it is faster and less costly as well.

If halftone positives are needed because of the demands of the plate-making process, these can be made by contact from the halftone negatives.

Making Halftone Negatives

Making halftone negatives from Bourges copy is extremely simple if the proper photographic techniques

are established and then rigidly controlled. The whole purpose of pre-separated artwork is to eliminate retouching, so it is obvious that the translation of the four separate images into halftones must be achieved with a high degree of accuracy. To shoot halftones higher than required with the intention of correcting them not only will defeat the purpose of the process but will introduce serious tone and color distortions. The photographic operations, therefore, should be devised to get an accurate reproduction of the tone scale in each of the four copy elements.

A ten percent tone in any of the four images of the artwork should be represented as a ten percent halftone dot in its respective negative. All other tone values must likewise be duplicated. The tone scales of all four negatives must be as closely matched as possible to maintain the tone scale and color scale balance of the original. This aspect is very easily controlled by means of a set of color scales (available from Bourges) of the overlay colors. These are similar to the black and white gray scale except that the tone steps are in color. The appropriate scale is placed adjacent to the overlay and photographed with it. If this scale is reproduced accurately in the halftone negative you can be sure that the overlay image likewise is correct. The conventional gray scale can be used when photographing the key drawing (black image), or a scale of tones prepared with the same art media as the drawing can be used. If the scales of all four negatives are closely matched, the set is in satisfactory balance.

Equal results are obtainable through the conventional engraved

FILTER CHART

BOURGES COLORS	FILM	FILTER (EASTMAN KODAK)	FILTER COLOR	FILTER FACTOR
Red (magenta)	Ortho.	#11 (X-1)	Light Green	2.3X
Yellow	Ortho.	#30 Rose Bengal	Rose	2.3X
Blue (cyan)	Ortho.	#12 Minus Blue	Yellow	2.3X

Note: If the cameraman prefers, high contrast Panchromatic film can also be used for the Blue, with a #A filter.

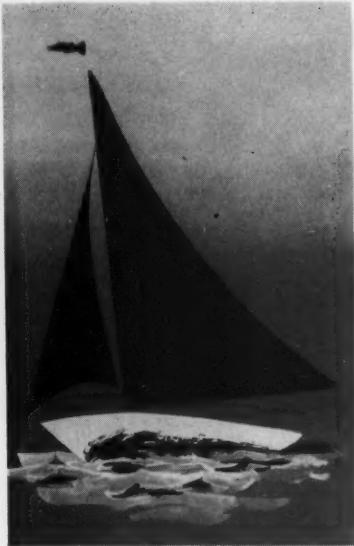


Figure E

This two-step technique for the drop-out assures absolute tone fidelity in reproducing Bourges copy. Fig. E shows the regular halftone negative made from screen or the newer contact screens. With engraved screens, the one-stop exposure (plus flash) is adequate for most Bourges copy but, if preferred, two and three stop exposures can be employed. The same screen angles as for conventional four-color process are used with Bourges copy, namely — Black 45°, Blue (cyan) 105°, (or 15°), Red (magenta) 75°, Yellow 90°.

As a general rule, the highlight region is the tonal area that suffers most in the halftone process. Special treatment sometimes is necessary to influence this highlight region and bring the highlight tones in proper relationship with the rest of the tone scale. The highlight effect may be merely to accentuate the contrast of brilliance of the image by diminishing the dots in the lighter tones, or it may be a complete elimination of the dots in the extreme highlights and white background areas. Screened negatives made in such a manner are classified as "highlight" or "drop-out" halftones. The simplest of these techniques, but the most difficult to control, is to make a normal halftone exposure and then follow it with a very short exposure at one or two stops larger than the largest stop used in the main exposure.

The duration of this highlight ex-

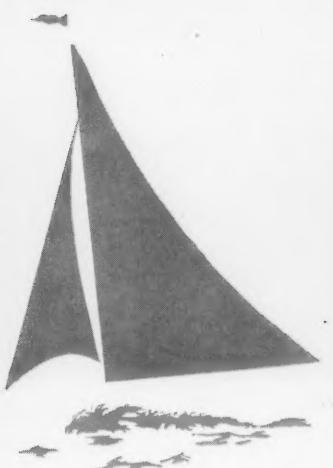


Figure F

the overlay. Tonal scales in color are used to check and control the accuracy of the halftone negative. Fig. F shows the drop-out mask which is made from

posure must be carefully regulated so that the veil produced over the highlight tones will remain confined to the extreme highlights and not encroach upon the light tones to be held. Another popular procedure is an alternate arrangement of the preceding method. Again, a normal halftone exposure is given to establish the tone values of the subject in the proper relationship. At the conclusion of the main exposure, the screen is removed from the image field and a very short exposure given which superimposes a weak line image of the highlight areas over the halftone. The line exposure must be so brief that the exposure is confined to the extreme highlights and background areas of the subject.

With these two methods, the normal and highlight exposures are very critical. Unless carefully exposed and processed, the highlighting exposure could easily affect the tones immediately below the highlights. This would result in a dilution and distortion of the tone scale which cannot be corrected by chemical reduction. The latter method described can be made virtually foolproof by doing it in two stages. Instead of recording both normal and highlight exposures on one piece of film, the two exposures are made on separate

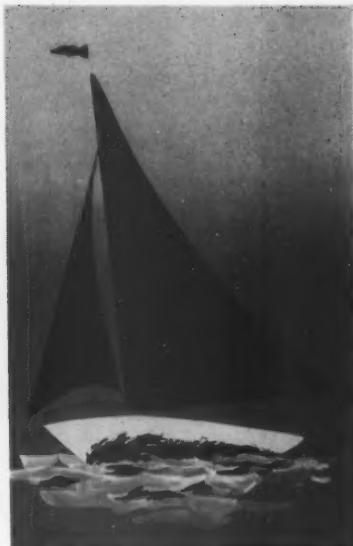


Figure G

the same overlay. Fig. G shows the halftone negative and the drop-out mask combined for platemaking or contact positives.

films. The regular full-scale negative is made without regard for the highlight areas (Fig. E). A second negative then is made with the halftone screen removed (Fig. F).

This, as previously explained, is merely a weak line negative which records only the extreme highlights and white background areas. This negative is combined with the normal negative (Fig. G) and the combination used in making the plate or making contact positives. The "drop-out" negative adds a veil over the extreme highlights and prevents them and the background from printing through. Because of this function the separate highlighting negative has been termed a "mask." The advantages which favor the use of the separate mask, even in view of the additional film cost are the following.

Since the drop-out exposure is made on a separate piece of film, the tonal scale of the regular halftone negative is in no way jeopardized—the normal halftone exposure becomes simple and easily controlled. The masking negative, if overexposed or over-developed, can be corrected by simple chemical reduction. This two stage technique is the method recommended for use with the Bourges Process. In addition to achieving

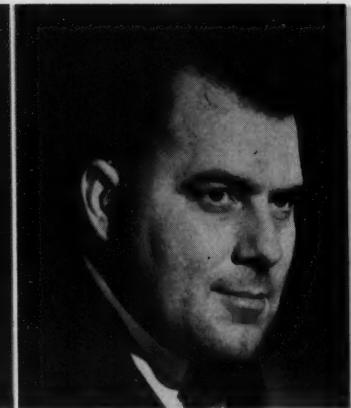
(Continued on Page 167)



Medio



Potts



Falconer

NAPL Plans Workshop For New York Convention

MEMBERS of the National Association of Photo-Lithographers, accustomed to a full program at the annual convention of the group, can look forward to an even fuller program when the convention gets underway in New York this month.

NAPL will hold its 24th annual convention in the Hotel Commodore, Sept. 19-22.

Walter E. Soderstrom, executive vice-president of NAPL, has put together a practical group of speeches and discussions designed to have wide appeal to both large and small litho shops.

The emphasis will be on round table discussions, with four of these

scheduled to run concurrently on Friday afternoon. They will be devoted to small offset duplicating presses, presses size 17 x 22" and larger, preparatory processes (including camera, correction, stripping and platemaking), and copy preparation for offset reproduction.

program a panel discussion of pre-sensitized plates, listed for Thursday afternoon. Of course, the traditional clinic session is scheduled for Saturday morning and afternoon.

As has been the custom for the last several years, William J. Stevens, Miehle Printing Press & Mfg. Co., will preside over five panelists who will cover film and camera, paper, press, ink and technical questions.

Four Round Tables

Lithographers will be free to stop at several or all of the round table discussions if they have questions for more than one. That way, according to Mr. Soderstrom, they will be able to benefit from not just one group of experts but from all four if they so choose. In addition to the round table discussions, NAPL has put on the

Bruno

Perrin

Mattson





Bickel



Wilkinson

Scott
Clark

NAPL Program

Wednesday, Sept. 19
EVENING

LITHOGRAPHERS' SELF ADVERTISING

Rex G. Howard, president, Howard Company.

PAPER—QUALITY AND AVAILABILITY

John L. Kronenberg, manager, lithographic paper division, S. D. Warren Company.

Thursday, Sept. 20
MORNING

THE MULTILITH, THE DAVIDSON AND SMALL PRESSES

James S. Wilkinson, Lithographic Consultant.

BUILDING A LITHOGRAPHIC SALES FORCE

Marshall L. Russell, sales manager, Printing Division, Spaulding - Moss Company.

THE PHOTON —

Demonstration by *W. W. Garth*, president, Photon Inc.

THE VALUE OF LITHOGRAPHIC RESEARCH

John F. Perrin, president, Lithographic Technical Foundation.

AFTERNOON

DESIGNING AND BUILDING A LITHOGRAPHIC PLANT

F. Arthur Bickel, president, Brown & Matthews, Inc.

ASSOCIATION BUSINESS —

Report of Membership, Resolutions and Nominating committees; Miscellaneous business.

PANEL DISCUSSION ON VARIOUS KINDS OF PRESENSITIZED PLATES

Presiding: *Hamilton C. Carson*, editor, Modern Lithography. Panelists: *E. B. Fritz*, Azoplate Corp.; *M. E. Gebhard*, Minnesota Mining & Manufacturing Co.; *Chester Gramstorff*, S. D. Warren Company; *Cal D. Harman*, Lithoplate, Inc.; *Gorson Wolitsky*, Ozalid Corp.; *Michael Bruno*, Lithographic Technical Foundation.

(Continued on Page 164)

Garth



Reynolds

Conway
Stevens

Many Litho

Convention



Amadeo R. Tommasini, (l.) immediate past president of the International Association of Printing House Craftsmen congratulates George Wise on his election as 1956-57 president. Mr. Wise is a partner in the firm of Dugan-Mills, Inc., Cleveland, Ohio.



Past presidents of the International Association of Printing House Craftsmen attending the 37th annual convention at the Biltmore Hotel in Los Angeles, August 12-15 were (l.-r.) Perry R. Long, Gordon J. Holmquist, Thomas P. Mahoney, Mr. Tommasini, Howard N. King, Frank McCaffrey, Thomas Cordis and Homer J. Winkler.



1956-57 officers elected at the August 11th annual conference of the Pacific Society of Printing House Craftsmen are (l.-r.) Robert Kerr, 3rd vice president; Harry Sorley, 2nd vice president; Mr. Tommasini, International president; George Y. Martin, president; Eugene C. Gallagher, 1st vice president; and John Gartner, standing in for J. Henry Willis, secretary-treasurer.

Problems Discussed at Big of Craftsmen in California

By Gordon L'Allemand

California Correspondent

MORE than 800 delegates from 80 local clubs of the International Association of Printing House Craftsmen, Inc., set a new West Coast convention record when they met at the Los Angeles Biltmore Hotel in their annual convention, Aug. 12-15.

Hundreds of members brought their families, and delegates and families not only enjoyed the convention, planned by Reaugh Fisher and his committee, but sampled widely the Los Angeles and Southern California tourist sites.

When the basic plans for the International Convention Educational Program were outlined, the total number of speakers was reduced to twenty-five in order to allow them to develop their subjects with special emphasis on the problems and needs of the shop operator and the production executive.

The results paid off, for the hundreds of delegates found the lecture papers and discussions broad, well rounded, highly informative of the latest developments, and treating upon the very problems they face daily in their own plants.

Excerpts from the lectures bearing most upon the lithographic phase of the printing industry follow:

"DEVELOPMENTS IN LITHOGRAPHIC PLATEMAKING." By *Bernard Sears*, vice president, Graphic Arts Corp. of Ohio:

Looked at some of the modern improved methods, materials, and tools of lithographic platemaking. "New stable base photographic films will assure register for color work

whether with two, three, or four colors, where heretofore glass was felt necessary. The emulsion on these films is excellent for camera exposures and for contact exposures. Contacts may also be dot etched. . . .

"Regarding camera lighting, present day motor-driven arc lamps save electrical current and carbons, and at the same time give a more intense light for shorter exposures. The Unitronics cold cathode lights are excellent for making black and white screen positives or negatives for continuous tone cutouts. They give faster exposures with uniform all-over lighting, and eliminate carbon dust. Camera composition of intricate color work in place of wet or dry stripping has greatly improved the quality of delicate inserts without increasing the lapse of time for this operation.

"Using Autopositive (Eastman Kodak) films for making reverses directly on the camera is another shortcut overlooked by many shops in the process of making reversals. . . . Camera exposure time can be reduced with improved lighting, and by employing the one-stop exposure system with the conventional glass screen, instead of using two or three stops. . . . The use of highlight and outline masks gives accurate results without the need for hours of opaquing. Many jobs, impossible to highlight by hand opaquing, can be highlighted with a highlight mask.

"Color correction by camera masking is a very intricate subject. It is so important in your present and future operations that firms involved in producing color process work are planning their own doom if they ignore

it. . . . The use of glass prints or Photolacs, for multiple negatives and/or positives, has many advantages. Present-day Photolacs are very black and as opaque as any silver emulsion, and won't fade. Photolacs can be made on ordinary composing machines without darkroom precautions.

"Polymetallic plate coatings featuring water development instead of chemical development now are available. . . . As far as the physical lithographic press plate is concerned, the availability of presensitized plates, polymetallic plates, improvement in grain, coatings, lacquers, inks and exposure guides, make the lithographic industry most fortunate."

"COLOR SCANNING AND PHOTO-MECHANICAL SEPARATION." By *Robert M. Smith*, graphic arts technical representative, Eastman Kodak Co., San Francisco:

". . . The problems of reproducing an original color picture, whether it be a color film transparency, a color print, or a sketch, are most complex, and have been the subject of much study by scientists and technologists of the printing and photographic industries. . . . With photographic color films there are definite limitations in their ability to reproduce tones and color values properly. The same limitations apply to printing inks, plates, and papers. . . . The great disadvantage in using conventional printing inks is that they make the work of correction difficult. . . . One cause of degraded color reproduction is the failure of the reproduction processes to render relative tone values correctly.

"The problem is inherent in the present printing plate production. . . . Tone rendering in the photo-mechanical reproduction process is characteristically inadequate. . . . The indiscriminate use of a black basic plate is certain to darken an illustration beyond the correct values. . . . Masking for wet-printing methods requires specialized techniques. . . . Unintentional variations in reproduction are due to imperfect control of photographic and photomechanical steps. These variations can be greatly reduced by controlling exposing and



LEFT: Karl Hoffman (l.) discusses presswork and die cutting with Thomas Piedimonte (c.) and Lou Longwemes. Hoffman and Longwemes are members of the San Francisco club, Piedimonte of the Santa Monica club. CENTER: Robert M. Smith, (l.) Eastman Kodak, shows his demonstration to fellow speak-



ers J. Homer Winkler (c.) and Kenneth Burchard. Display shows how color scanning machines will make color corrections automatically. RIGHT: Ronald Renny (l.) and Thomas Mahoney (c.) look at a copy of *Western Family* magazine, whose art director is Merle Armitage (r.).

because of the large number of persons who are injured in all branches.

... The management of every graphics arts plant that is interested in good employe relations, cutting costs and improving quality should be vitally interested in safety programs.

"The industry's high accident record has been caused by management's failure to recognize the need for sound accident prevention programs.

... Accidents to workmen and machines cause not only human suffering, but loss of production time and efficiency. . . . Big industries realize that industrial safety pays big dividends. . . . Acquaint new employees with company policies, give a sound pre-employment physical examination and have properly trained foremen and supervisors.

"The unsafe worker is a menace to himself and others. . . . I don't know of any industry in our nation today that could enjoy a better safety record than our own graphic arts. . . . If management in every plant would show proper interest and leadership in starting safety programs."

"**HANDLING PAPER IN YOUR PLANT.**" By Dr. Robert F. Reed, Lithographic Technical Foundation, Chicago:

"... From the standpoint of production, the printability of paper includes: 1 — Its ability to be fed to the press and delivered in a flat condition; 2 — Ability to hold register; 3 — Adequate pick resistance; 4 — Freedom from lint and dust; 5 — Ability to accept an ink impression; 6 — Freedom from chemicals that damage the plate, cause ink to emul-

(Continued on Page 165)

processing conditions. For accurate control the use of a densitometer is essential.

"We are rapidly entering an electronic age, and electronics are going to be with us in more and more phases of our life. The electronic scanning of color separation and masking almost completely obviates the human element. . . ."

"PROBLEMS IN LITHOGRAPHIC PRESSWORK." By Karl Hoffman, field engineer, Printing Developments, Inc., San Francisco:

"... It is generally believed that any plate that can run the first few hundred sheets as expected is a good plate. Why then do many such plates go 'blind' after a good start? Getting the plate onto the cylinder as near the true-round as possible is the great problem. . . . A lot more plates are ruined by excessive plate clamp pressure than any troubles that can be caused by insufficient pressure. . . . Three fundamentals in plate make-ready are: stretching a dry plate onto a dry cylinder, adjusting plate clamp pressure, and packing. . . . I think Lithure and Lithengrave plates can stand more adverse conditions than any plates I have worked on. . . ."

"PREPARATION OF TYPOGRAPHIC COPY FOR LITHOGRAPHIC AND PHOTOGRAPHIC REPRODUCTION." By Ernest K. Schroder, McLean Bros., Ltd., Montreal:

"... Good typography is the foundation of good printing. One of the first steps in securing a trouble-free job for printing by any available process is the provision of clearly typewritten copy. Attention should

be focused upon the inadequate condition in which material is sometimes brought into the plant, such material showing lack of planning and a disregard of details.

"The layout rough often misrepresents the finished art work and final layout. A carefully prepared layout is to the graphic arts what an accurate drawing from an architect is to a builder."

"PRODUCTION PLANNING IS A 'MUST' TODAY." By Ron Renny, president, Craftsmen Press, Seattle, Wash.:

"... Production planning is vital to harmony within a printing organization. There should be a close, friendly understanding between sales and production. This spirit can only be developed by confidence in a workable production system. . . . Planning is the specifying of how a job is to be done. . . . Production planning can arrange the work so that, for example, the cameraman will receive all photos scaled, crop marks indicated, and type of stock and plates to be used completely indicated so he can obtain a maximum output for the day. . . . If the pressroom is to turn out a full production, there must be a press layout showing margins, gripper, side guides, and definite color instructions. In this way high cost machines will not be left standing idle. . . ."

"SAFETY — ITS NEW SIGNIFICANCE TO THE GRAPHIC ARTS." By Peter J. Bernard, director of personnel and safety for H. Wolff Book Mfg. Co., New York:

"... Considerable interest has been aroused in our printing industry by the need for adequate safety programs

YOUR BEST SALESMEN

Whippet
LETTERPRESS INKS
PRONTO
OFFSET INKS

MANUFACTURED BY
LEWIS ROBERTS, INC.

Printers and lithographers know they can rely on the press performance of all INKS made by LEWIS ROBERTS because they are formulated with specific regard to the plates, paper and process to be used.

You can make printing ink your best salesman when you use fine printing inks and precision offset inks to present your customers' sales message. The final printed result will be outstanding when LEWIS ROBERTS INKS are on the job.



LEWIS ROBERTS, INC.
NEWARK 5, N.J.

BRANCHES AND DISTRIBUTORS IN 20 CITIES

Profit Sharing In the Lithographic Industry

PROFIT sharing plans are becoming more common in the lithographic industry. Only a few years ago, such plans were unique in this field. Today, they are becoming more common.

In most cases, a portion of the litho company's profits is put in trust for employes who have worked for the company a minimum number of years. The amount credited to each employe depends, first of all, on the size of the profits, if any, that the company earns in each year. A portion is credited to the participants, usually depending on length of service and basic wages.

At retirement age, which varies company to company, the employe can draw his funds from the trust, usually in one of several ways. The longer he has been with the company, and the better the profits, the more he will be eligible to receive.

Because most of the profit-sharing programs are of fairly recent origin in the litho industry, several of the companies make special compensation to long-time employes who have been under the plan in only the most recent years of their employment. Most companies also have special provisions for death or disablement.

McCormick - Armstrong Co., Wichita, Kan., and Spaulding-Moss Co., of Boston, are typical of litho firms sponsoring profit-sharing programs of this type.

Edwards Brothers, Inc., Ann Arbor, Mich. lithographers, has a more direct plan. The company, which just completed the best year in its 63-year history, pays profit-sharing checks to eligible employes after profits have been determined.

Here are some details of each of these plans:

McCormick-Armstrong

Plan was started Dec. 31, 1955 as a "profit-sharing retirement plan" to help create independent estates for employes in later life and to provide for the support of their dependents upon the employe's death. Every full-time employe of three years, and at least 30 years of age, is eligible.

The company will deposit a percentage of net operating profit. Five percent of adjusted net worth as of

the end of the preceding year will be deducted and percentage of remaining profit will be deposited to the trust as follows:

First \$100,000 or adjusted net income — 10 percent; all over \$100,000 of adjusted net income — 15 percent. Here are more details of the plan:

1. The yearly trust earnings will be credited to each participant; and
2. The appreciation or depreciation of the trust assets will be credited to each participant. Both of these credits will be made in the ratio of the amount standing to the credit of each participant to the total credit of all participants.
3. Any amounts forfeited during the year by persons leaving the company will then be credited to each other participant (not subject to forfeiture) in the same manner as above.
4. The current year company contribution will be added as follows:
 - (a) Each participant shall receive one unit of credit for each \$100.00 (or fraction thereof) of annual base compensation up to a maximum of \$10,000.00 (or 100 units), but not to include overtime or bonuses.
 - (b) One unit credit will be given for each full calendar year of continuous service, including past service.
 - (c) The total unit credit of all participants divided into the total amount of the current year company contributions shall determine the dollar value of each unit credit. For any participant, the dollar value determined above times his number of points, or units of credit, will determine his share of the company contribution.

Employes may retire at 65; it is compulsory at 72. In case of disablement, the employe may claim his funds, in case of death they go to his beneficiary. The employe must stay with the company five years to be eligible to draw the funds, in case of termination or dismissal. After that time, the employe has a permanent

vested interest, and can withdraw (normally in equal monthly payments over 10 years) a percentage of the funds in trust, the increments increasing evenly until 20 years employment, at which time he can withdraw all the money.

On retirement, he has a choice of lump-sum payment, monthly payments over 10 or 15 years or a combination of these methods.

Spaulding-Moss

Spaulding-Moss inaugurated its deferred profit-sharing plan late in 1951.

In this brief period, scores of the firm's older workers have become convinced of the merits of the plan, according to ML's Boston correspondent, and are expressing their enthusiasm—even though none will benefit until he severs his connection with the company. Their chief regret is that the plan was not started years ago. Each now feels that, to some extent, he is working for himself, not just for the company.

The company, in turn, which long has been in the forefront in management-employee relations, feels it is recognizing its obligation to the workers who have helped it expand.

The firm is one of the largest of its kind in New England, occupying four branches in the city, and employing more than 300 employees, with close to 200 who at present stand to benefit under the deferred profit-sharing plan. This applies to those who have been with the firm two or more years.

Benefits under the plan are directly proportional to the company's profits. The firm appointed an advisory council as one channel of communication with its employee group. "This council represents a cross section of all our employees and is composed of nine members, three members being replaced each six months," Verner O. Nelson, personnel manager, explained. "In this way, eventually every employee will have an opportunity to serve," he added.

"Our problem is a little different from the company which has a cash profit-sharing plan," Mr. Nelson continued. "When actual cash is not distributed, it becomes more of a

problem to convince the employee that the plan is real, as no immediate benefit is visible.

"In our deferred plan, the employee receives only a slip of paper telling how much has been deposited to his account. The employee can't buy anything with this paper, so we were faced with the problem of maintaining his interest."

A year after the plan was put into effect, two workers severed connections with the company. The firm capitalized on this by posting bulletins with photos of the first two checks issued, along with the names of the recipients and the reasons for the payments.

"Today, employees are checking regular notices to see their standing in the plan," Mr. Nelson stated.

In a tour of the various branches of the company, officials and employs were quizzed on the plan.

"I've always felt we wanted to share as much as possible the so-called profits, with those who helped to make them," said Philip B. Terry, vice president and general manager. "We've had a retirement plan for the last 25 years, and we've tried various bonus plans. This deferred profit-sharing plan is supplemental to these and the worker is able to build up a substantial principal in proportion to the profitability of the company over a period of years.

"The essence of the plan is that the money does not become available, practically speaking, until the worker severs his connection with the company. At that time, it can serve as the basis for a very sizable annuity—a sort of pension approach."

In describing details of the plan, Everett J. Croscup, comptroller, and trustee of the plan, said that "at the end of the year, after the profits are determined, a portion is set aside for dividends to stockholders. There's also a reserve for replacement and improvement for equipment. Then, the profit-sharing plan comes in for 40 percent of what is left.

"That 40 percent is distributed on the basis of years of service and dollars of basic salary. The employee makes no contribution whatever."

Secretary-treasurer of the firm,

Archibald H. Spaulding, son of the founder, has been in charge of all lithographic work since 1929, and has been interested in profit sharing for 30 years.

"I am firmly convinced that profit-sharing is a fundamental necessity in our American business today. I think that the enormous growth of profit-sharing throughout the country is ample proof that it is becoming an ever-increasing factor in our American economy."

His son, John Spaulding, supervisor and a trustee of the plan, echoed the feelings of his father. He has grown up with the firm his grandfather founded. Others, too, have practically grown up with the firm. Said Anthony Caliendo, works manager of the photolithographic division, and 32 years with the company, "I'm very happy over the plan."

Emil G. Schuler, plant superintendent, said, "I think it is marvelous. I'm a little older than our average workers, and it means a lot to me."

Edward J. Rose, planner, and current secretary of the advisory council, was another to express pleasure over the adoption of the plan.

Edwards Brothers

The Edwards profit-sharing plan was started in 1947. Most recently, checks totaling \$51,020 were handed out to 152 employees, largest amount in the plan's history. This fund represented 20 percent of the firm's profits in the period Dec. 1, 1955 to June 30, 1956. An employee who missed no work during that period received a check for \$416, representing an extra 35 cents an hour worked in the seven-month period.

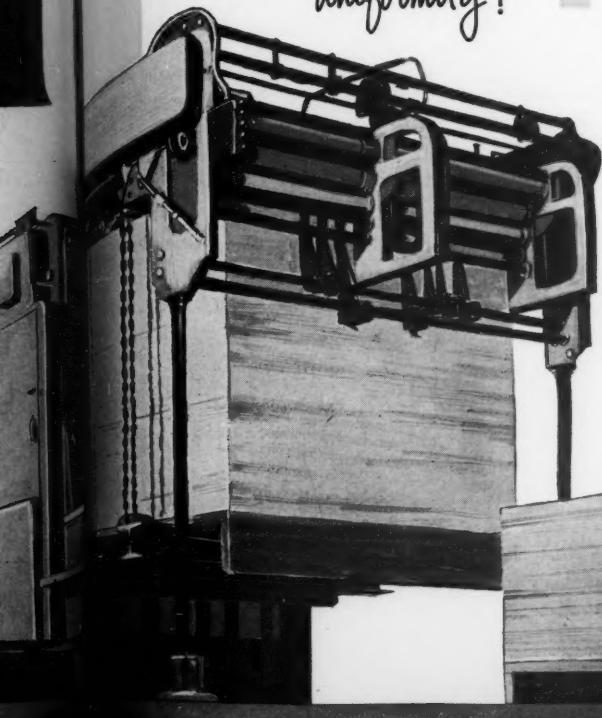
During the past year, employees received two profit-sharing payments (the other one was made last December), totaling \$73,319, or an additional 31 cents an hour. A full share was \$636.

This is by no means a complete survey of the picture on profit-sharing and other forms of extra remuneration in the lithographic industry. The programs described are just three of the most outstanding. In future issues, ML will carry reports of other programs in industry plants.★

**Double
coated
offset at
no extra
cost!**



- > high stability!
- > trouble-free press performance!
- > quick ink-setting!
- > superior pick resistance!
- > brighter color!
- > maximum uniformity!



Now double coated on the papermaking machine...Consolidated Enamel Offset Papers offer greater value than ever before!

Just name the qualities you've always wanted in enamel offset paper. Trouble-free press performance? Uniform reproduction quality? High dimensional stability? Superior pick resistance?

These are just a few of the many advantages double coating now offers in Consolidated's PRODUCTOLITH, CONSOLITH GLOSS AND CONSOLITH OPAQUE.

Consolidated . . . the company that pioneered modern on-the-machine enamel papers . . . now offers offset papers, *double coated on both sides* in a single high-speed operation on the papermaking machine.

As a result, the entire line of Consolidated Enamel Offset Papers now gives you all the advantages of double coated performance at no increase in prices!

Free trial sheets! Your Consolidated merchant will be glad to give you trial sheets of these amazing new offset values. Run them yourself. Compare performance, cost and results. See why, grade for grade, this streamlined double coating method makes Consolidated Enamel Offset Papers the top performers on the market today.

Consolidated

ENAMEL PRINTING PAPERS

production gloss • modern gloss • flash gloss • productolith • consolith gloss • consolith opaque
CONSOLIDATED WATER POWER & PAPER CO. • Sales Offices: 135 So. LaSalle St., Chicago 3, Ill.

How Much Is Overtime Costing You?

By Frank R. Turner, Jr.

Cost Accountant, National Association of Photo-Lithographers

MANY lithographers wonder how they can recoup the cost of working overtime, particularly where the overtime is not chargeable to any particular customer. We have therefore set up in Chart A cost data on a typical small New York lithographic plant, with a straight time 35 hour week, 10 paid holidays and three weeks vacation.

In Chart B we show costs on the same lithographic plant computed, however, on varied hours of overtime, some of it time and one-half and some double time for the cost centers shown in Chart C.

In this study in the camera department we have charged four hours of overtime at time and one-half per week throughout the year, with no double time overtime hours, figured as having been worked. It is interesting to note that since there were but few time and one-half hours and no double time hours worked, that there is practically no difference in the hourly cost in the camera department between the straight time and the overtime costs as illustrated on Charts A and B.

However, in the stripping department, where we have charged six hours of overtime at time and one-half and two hours at double time each week throughout the year, the resulting hourly cost is considerably higher than straight time hourly costs because the high cost of double-time direct labor wage costs.

In many lithographic plants overtime costs run considerably higher than those shown in these examples. In some cities double time costs are paid after two hours of overtime at time and one-half. In some cities lithographic workers receive a paid supper period at overtime rates after so much overtime has been worked.

Any study of your hourly rates should be based on wages, hours and working conditions in your plant. All overtime costs should be recouped from your customers, either by having a certain amount of overtime costs included directly in your normal budgeted hourly estimating rates or by agreement with a customer to (Continued on Page 63)

CHART C

DEPARTMENT	Base Rate Per Week	Rate Per Hour	Time and one half Rate per Hour	Double Time Rate per Hour
Cameraman	\$98.16	\$2.805	\$4.208	\$5.610
Stripper	102.20	2.920	4.380	5.840
Opaquer	89.70	2.563	3.845	5.126
Platemaker	102.20	2.920	4.380	5.840
Two Pressmen 17"x22"	196.32	2.805 (ea.)	4.208	5.610
One Pressman—22"x34"	108.92	3.112	4.668	6.224
One Operator—22"x34"	81.03	2.315	3.473	4.630
Cutter—39"	92.57	2.645	3.968	5.290
	\$871.10			

OVERTIME HOURS COMPUTATION

DEPARTMENT	Weekly		Weekly	
	Time and One Half Hours	Double Time Hours	Time and One Half Dollars	Double Time Dollars
Cameraman	4	0	\$16.83	—
Stripper	6	2	26.28	\$11.68
Opaquer	2	1	7.69	5.13
Platemaker	5	3	21.90	17.52
Two Pressmen—17"x22"	(ea.) 2	(ea.) 8	(ea.) 8.42	(ea.) 44.88
One Pressman—22"x34"	4	2	18.67	12.45
One Operator—22"x34"	4	2	13.89	9.26
Cutter—39"	2	0	7.94	—
	31	26	\$121.62	\$100.92

TOTAL DIRECT LABOR

DEPARTMENT	Base Rate Per Week	Time and One Half	Double Time	Total Weekly Direct Labor	Annual Direct Labor
Cameraman	\$98.16	\$16.83	—	\$114.99	\$5,979.48
Stripper	102.20	26.28	\$11.68	140.16	7,288.32
Opaquer	89.70	7.69	5.13	102.52	5,331.04
Platemaker	102.20	21.90	17.52	141.62	7,364.24
Two Pressmen— 17" x 22"	(2) 196.32	(2) 16.84	(2) 8.96	(2) 302.92	(2) 15,751.84
One Pressman— 22" x 34"	108.92	18.67	12.45	140.04	7,751.84
One Operator— 22" x 34"	81.03	13.89	9.26	104.18	5,282.08
Cutter	92.57	7.94	..	100.51	5,226.52
	\$871.10	\$130.04	\$145.80	\$1,146.94	\$59,640.88

NUMBER OF PRODUCTIVE HOURS

35 Hours per Week x 52 weeks.....		1,800
Less: Three week vacation.....	105	
10 Paid Holidays, not worked.....	70	175
Hours Worked		1,645

NUMBER OF HOUR:

DEPARTMENT	Normal Yearly Hours at 100% Productivity	Time and One Half Yearly Hours	Double Time Yearly Hours	Total Hours at 100% Pro- ductivity	Percentage Above Normal Work Week	
					Normal Yearly Hours at 100% Productivity	Time and One Half Yearly Hours
Cameraman	1,645	208	—	1,853	12.64	
Stripper	1,645	312	104	2,061	25.29	
Opaquer	1,645	104	52	1,801	9.48	
Platemaker	1,645	260	156	2,061	25.29	
Two Pressmen—17"x22"	(2) 3,290	(2) 208	(2) 832	4,330	31.61	
One Pressman 22"x34"	1,645	208	104	1,957	18.97	
One Pressman 22"x34"	1,645	208	109	1,957	18.97	
Cutter—39"	1,645	104	—	1,749	6.32	
	14,805	1,612	1,352	17,769		

**CHART A BUDGETED HOURLY COST OF OPERATING A SMALL LITHOGRAPHIC PLANT ON A SINGLE SHIFT BASIS
TWO PRESSES 17-1/2 x 22-1/2 - ONE PRESS 23 x 36**

Line No.	Camera 24" Mach. Hr.	Stripping B. & W. Man Hr.	Opaquing Man Hr.	Plate-making Mach. Hr.	2 Presses 17-1/2 x 22-1/2 Mach. Hr.	1 Press 23 x 36 Mach. Hr.	Cutter 39" Mach. Hr.	TOTALS
1. Investment in Cost Center	\$ 9,500.00	\$ 400.00	\$ 400.00	\$ 5,500.00	\$29,300.00	\$26,200.00	\$ 6,850.00	\$ 78,150.00
2. Rate of Depreciation.....	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	
3. Floor Space-Sq. Ft.	800	60	60	500	400	400	150	2,370
4. Total Wattage of Arc Lamps	2,000	-	-	3,850	-	-	-	-
5. Total Horsepower of Motors2	-	-	1/2	8	6	2	-
FIXED CHARGES (NON-VARIABLE)								
6. Depreciation	\$ 712.50	\$ 30.00	\$ 30.00	\$ 412.50	\$ 2,197.50	\$ 1,965.00	\$ 513.75	\$ 5,861.25
7. Rent (rate per sq. ft.-\$1.00)	800.00	60.00	60.00	500.00	400.00	400.00	150.00	2,370.00
8. Fire and Sprinkler Insur. (rate \$3.00 per M)	28.50	1.20	1.20	16.50	8.70	7.80	20.55	234.45
VARIABLE CHARGES								
9. Payroll (direct labor only)	5,104.32	5,314.40	4,664.40	5,314.40	10,208.64	9,877.40	4,813.64	45,297.20
10. Indirect Labor (Supervision and Miscellaneous-15%)	765.65	797.16	699.66	797.16	1,531.30	1,481.61	722.05	6,794.59
11. Welfare Benefits (\$4.50 per man per week)	234.00	234.00	234.00	234.00	468.00	468.00	234.00	2,106.00
12. Payroll Taxes (Soc. Sec. and Unemploy. Insur.-5.0%)	248.28	249.86	244.98	249.86	496.56	494.08	246.10	2,229.72
13. Workmen's Comp. Ins. (rate \$14 per M)	82.18	83.96	75.10	83.96	164.38	152.53	77.50	719.59
14. Light, Heat and Power (rate \$.03 per KWH)	63.64	15.00	15.00	125.04	176.72	132.53	44.18	572.11
15. Direct Supplies	220.00	120.00	110.00	960.00	800.00	575.00	60.00	2,845.00
16. Repairs to Equipment (2% of Investment)	190.00	8.00	8.00	110.00	586.00	524.00	137.00	1,563.00
17. Subtotal	8,449.07	6,913.58	6,142.34	8,803.42	17,116.98	16,148.75	7,018.77	70,592.91
18. General Factory Expenses (10%)	844.91	691.36	614.23	880.34	1,711.70	1,614.87	701.88	7,059.29
19. TOTAL MANUFACTURING COSTS	9,293.98	7,604.94	6,756.57	9,683.76	18,828.68	17,763.62	7,720.65	77,652.20
20. Administrative and Selling Overhead (50%).....	4,646.98	3,803.46	3,378.27	4,841.86	9,414.32	8,881.79	3,880.32	38,826.00
21. TOTAL COSTS	\$13,940.96	\$11,407.40	\$10,134.84	\$14,525.62	\$28,243.00	\$26,645.41	\$11,580.97	\$116,478.20
22. Manufacturing costs per productive hour, based on an operating activity of: 85%-35 Hour Week-1398 Hours	\$ 6.65	\$ 5.44	\$ 4.83	\$ 6.93	\$ 6.73	\$ 12.71	\$ 5.52	
75% " " -1234 "	7.53	6.16	5.48	7.85	7.63	14.40	6.26	
60% " " - 987 "	9.42	7.71	6.85	9.81	9.54	18.00	7.82	
23. All inclusive costs per productive hour, based on an operating activity of: 85%-35 Hour Week-1398 Hours	9.97	8.16	7.25	10.39	10.10	19.06	8.28	
75% " " -1234 "	11.30	9.24	8.21	11.77	11.44	21.58	9.38	
60% " " - 987 "	14.12	11.56	10.27	14.72	14.31	27.00	11.73	

(In determining hourly cost rates on the 17-1/2 x 22-1/2 presses, the hours listed in lines 22 and 23 above have been doubled.)

**CHART B BUDGETED HOURLY COST OF OPERATING A SMALL LITHOGRAPHIC PLANT ON A SINGLE SHIFT BASIS
TWO PRESSES 17-1/2 x 22-1/2 - ONE PRESS 23 x 36**

Line No.	Camera 21" Mach. Hr.	Stripping B. & W. Man Hr.	Opaquing Man Hr.	Plate-making Mach. Hr.	2 Presses 17-1/2 x 22-1/2 Mach. Hr.	1 Press 23 x 36 Mach. Hr.	Cutter 39" Mach. Hr.	TOTALS
1. Investment in Cost Center	\$ 9,500.00	\$ 400.00	\$ 400.00	\$ 5,500.00	\$29,300.00	\$26,200.00	\$ 6,850.00	\$ 78,150.00
2. Rate of Depreciation.....	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	
3. Floor Space-Sq. Ft.	800	60	60	500	400	400	150	2,370
4. Total Wattage of Arc Lamps	2,000	-	-	3,850	-	-	-	-
5. Total Horsepower of Motors2	-	-	1/2	8	6	2	-
FIXED CHARGES (NON-VARIABLE)								
6. Depreciation.....	\$ 712.50	\$ 30.00	\$ 30.00	\$ 412.50	\$ 2,197.50	\$ 1,965.00	\$ 513.75	\$ 5,861.25
7. Rent (rate per sq. ft. - \$1.00)	800.00	60.00	60.00	500.00	400.00	400.00	150.00	2,370.00
8. Fire and Sprinkler Insur. (rate \$3.00 per M)	28.50	1.20	1.20	16.50	8.70	7.80	20.55	234.45
VARIABLE CHARGES								
9. Payroll (direct labor only)	5,979.48	7,288.32	5,331.04	7,364.24	15,751.84	12,699.44	5,226.52	59,610.88
10. Indirect Labor (Supervision and Miscellaneous-15%)	896.92	1,093.25	799.65	1,104.64	2,362.78	1,904.92	783.98	8,946.14
11. Welfare Benefits (\$4.50 per man per week).....	234.00	234.00	234.00	234.00	468.00	468.00	234.00	2,106.00
12. Payroll Taxes (Soc. Sec. and Unemploy. Insur.-5.0%)	251.85	264.66	219.98	265.23	538.44	515.25	219.20	2,337.31
13. Workmen's Comp. Ins. (rate \$14 per M)	85.36	88.11	84.00	88.26	178.68	172.27	83.78	780.46
14. Light, Heat and Power (rate \$.03 per KWH)	71.70	18.80	16.43	156.71	232.57	157.64	46.95	700.80
15. Direct Supplies.....	247.81	150.35	120.43	1,202.78	1,052.88	684.08	63.79	3,522.12
16. Repairs to Equipment (2% of Investment)	211.02	10.02	8.76	137.82	771.23	623.40	145.66	1,910.91
17. Subtotal.....	9,525.14	9,238.71	6,935.49	11,182.68	21,410.52	19,668.60	7,518.18	88,110.32
18. General Factory Expenses (10%)	952.51	923.87	693.55	1,146.27	2,104.15	1,966.86	751.82	8,841.03
19. TOTAL MANUFACTURING COSTS	10,477.65	10,162.58	7,629.04	12,630.95	26,445.67	21,635.46	8,270.00	97,251.35
20. Administrative and Selling Overhead (50%).....	5,238.83	5,081.29	3,814.52	6,315.48	13,222.83	10,817.73	4,135.00	48,625.68
21. TOTAL COSTS	\$15,716.48	\$15,243.87	\$11,443.56	\$18,946.43	\$39,668.50	\$32,453.19	\$12,405.00	\$145,877.03
22. Manufacturing costs per productive hour, based on an operating activity of: 85%-35 Hour Week	Hours 1575 \$6.65	Hours 1752 \$5.80	Hours 1531 \$4.98	Hours 1752 \$7.18	Hours 3681 \$7.18	Hours 1663 \$13.01	Hours 1187 \$5.56	
75% " " "	1390 7.58	1546 6.57	1351 5.65	1546 8.17	3218 8.14	1168 11.74	1312 6.30	
60% " " "	1112 9.42	1237 8.22	1081 7.06	1237 10.21	2598 10.18	1174 18.43	1049 7.88	
23. All inclusive costs per productive hour, based on an operating activity of: 85%-35 Hour Week	Hours 1575 9.98	Hours 1752 8.70	Hours 1531 7.47	Hours 1752 10.81	Hours 3681 10.78	Hours 1663 19.51	Hours 1187 8.34	
75% " " "	1390 11.31	1546 9.86	1351 8.17	1546 12.25	3218 12.21	1168 22.11	1312 9.46	
60% " " "	1112 11.13	1237 12.32	1081 10.59	1237 15.32	2598 15.27	1174 27.64	1049 11.83	

(In determining hourly cost rates on the 17-1/2 x 22-1/2 presses, the hours listed in lines 22 and 23 above have been doubled.)

a 3-way winner

.... ROYAL ZENITH 29 SINGLE COLOR OFFSET PRESS

Presented by ZARKIN MACHINE CO., INC. Est. 1928

Win 3 ways with this fine proven press—pride and joy of over a score of U. S. lithographic plants which swear by the Royal Zenith 29!

Get economy through easy set-up and accessibility, quick getaway, simple operation, automatic controls, built-in washup device, marvelous ink distribution.

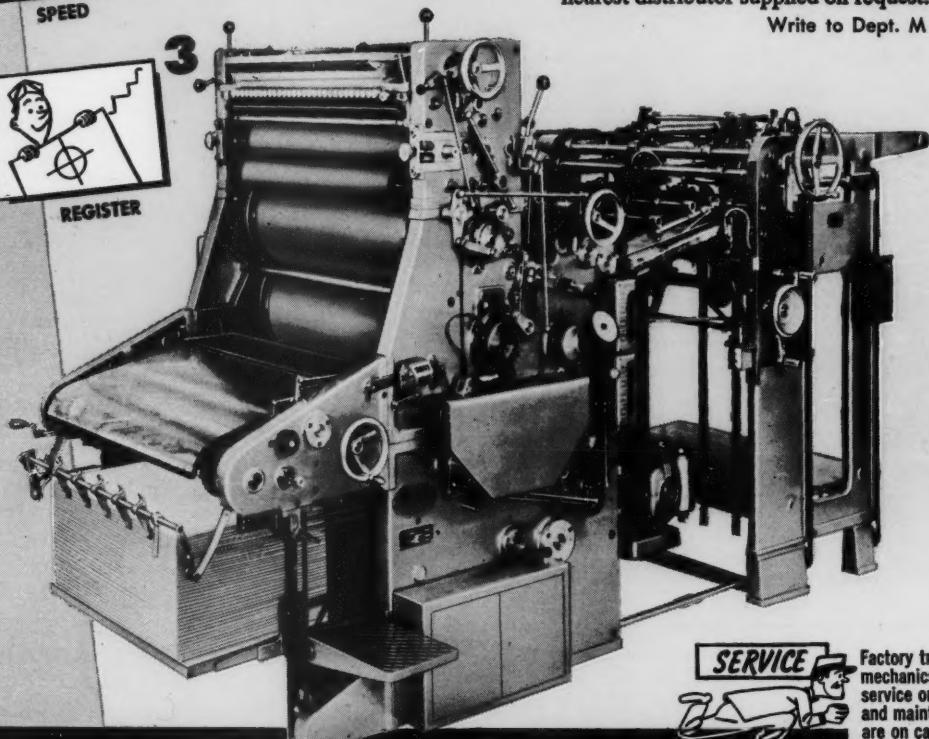
Get real speed—up to 7000 impressions per hour—with top quality. This kind of speed coupled with economy means big profits—with high production and on-time delivery assured!

Get perfect register with micro adjustments of plate and blanket cylinders, fountain, grippers, feed and delivery! Sturdy construction and precision machining mean that register can be set accurately to a hairline without fear of shifting or distortion.

Low initial cost and extreme economy of operation will make the Royal Zenith 29 the biggest money-maker in your plant. Call, write or wire for details today! Name of your nearest distributor supplied on request.

Write to Dept. M

- 1
- 2
- 3



Factory trained mechanics for service on parts and maintenance are on call anywhere in the U. S. on a 24 hour basis!

Royal Zenith Corporation

WORLD'S FINEST LITHOGRAPHIC PRESSES

34-20 ELEVENTH STREET • LONG ISLAND CITY 6, N. Y. • ASTORIA 4-0808

Surveys Show Lithographers Like Mechanical Dampener Roller Cleaners

AN overwhelming majority of lithographers who have installed mechanical cleaners for dampener rollers have found them a profitable investment for improving quality, reducing costs and saving skilled labor time, according to two national surveys conducted earlier this year on the subject of cleaning dampener rollers for offset presses.

One of the surveys, with replies from 144 lithographers, was made by the National Association of Photo-Lithographers. The other, with replies from 63, was conducted by the Allied Research Bureau, Philadelphia, for Jomac, Inc., a leading manufacturer of roller cleaners, also of Philadelphia.

Results are broken down in accompanying tables.

A large percentage of those surveyed commented on the improved quality derived from mechanical cleaning. In addition, 31 percent of the respondents from one survey wrote that the equipment saves valuable time.

Better Quality, Lower Costs

In the NAPL survey, 93 percent of the users of mechanical cleaners stated that they improved quality and 87.5 percent declared they lowered costs.

In the Allied Research survey, lithographers were asked to list good points of their mechanical cleaning equipment. The highest percentage of responses was related to improved

quality—37 percent said that the equipment cleaned well and 19 percent that it made solid, smooth, uniform dampener covers. Testimony that it cleaned faster than by hand was offered by 17 percent.

In the NAPL survey, of 144 replying, 88 said they were using mechanical dampener roller cleaners. Even of the 56 who did not have cleaners and cleaned by hand, four submitted that mechanical cleaners were a good investment.

Moreover, almost one-third of those who did not have mechanical cleaners wanted to know the results of the survey, indicating that they had not already purchased mechanical cleaners because they did not know enough about them. Many stated that they were about to purchase one.

For Breaking In

In addition to improving quality and lowering costs, mechanical dampener roller cleaners have a decided advantage over hand cleaning methods in that they can be used to break in new roller covers and remove all lint in addition to cleaning dirty rollers, according to Jomac. This saves valuable time ordinarily required to "run in" new or recovered rollers on the press.

The importance of the breaking in feature is evidenced by the Allied Research survey, in which 94 percent gave an affirmative answer to the question: "Do you use the machine

for breaking in new dampeners?" Twenty-seven percent listed this feature as one of the good points.

In the NAPL survey, 16 percent of the mechanical cleaner users included breaking in new dampener covers in their comments. As shown in Table 2, they advanced two principal reasons for favoring roller cleaners for this purpose: (1) they remove lint from the covers, and (2) they increase the uniformity of the roller.

Typical comments from those who mentioned breaking in are:

"We break in all dampeners before using, saving press time."

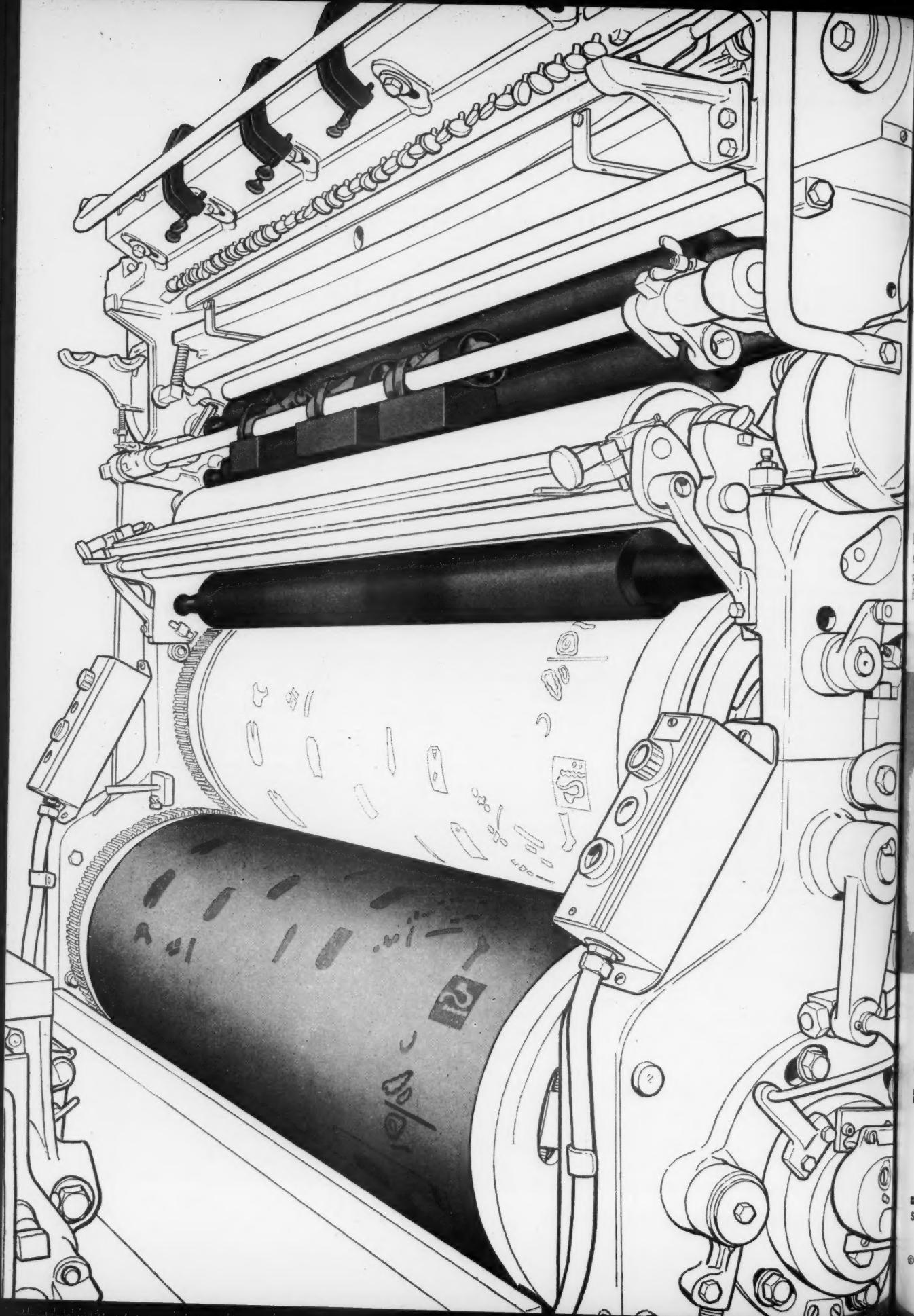
"Particularly good for running in newly covered dampeners. Eliminate lint and low spots."

"This proves a worthwhile saving due to the fact that resetting of dampeners is unnecessary. Quality is improved because less lint is transferred to press plate."

"Any loose material cleans out and the rollers are again even and smooth for easy press adjustment."

The listing of "good points" of mechanical cleaners from the Allied Research survey and the volunteered comments from the association survey returns provide an insight into the many and varied benefits derived from replacing erratic, slow hand-cleaning methods with fast, uniform mechanical cleaning, the research group emphasizes.

Experience of lithographers testifies



The
Dayco
You
switch
every
Start
tion.
easy
Syn
long,
smoo
you'll
far les

Dayco
Steel

© D.R.

More ways to get more production, more quality, more color and more profit out of your presses

There's a *sure* way to get more out of your offset presses. It's the Dayco Combination that does the job!

You'll get a 40% average increase in color production by switching to these Dayco products. Other lithographers do it every day—so can you.

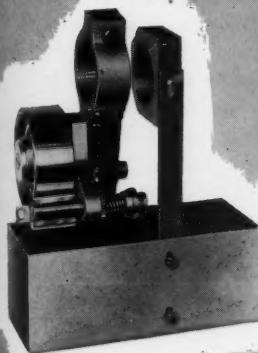
Start with the **Dayco Offset Roller** that really boosts production. No roller re-setting with Daycos—and the initial set is easy because Daycos are ROUND . . . precision ground.

Synthetic rubber Daycos stay round, won't crack or split under long, high speed runs. Daycos spread ink on the plate in a smooth, even film—give the most uniform ink distribution you'll ever see. And sleeve-type Daycos can be re-Daycoed at far less than their original cost for greater savings.

Then include **resilient, smooth-faced Dayco Offset Blankets** that give you fine highlights and clean shadows and provide high offset quality. Faster recovery after blanket mash assures the same high fidelity sheet after sheet on the longest runs. Daycos have uniform thickness, will not swell, emboss, or deboss.

You'll get a **real competitive advantage** when your presses are equipped with Dayco Color Separators and Fountain Dividers. They let you run multi-color jobs one time through your one-color presses without cutting a single roller.

The Dayco Offset combination is the sure way to make the most of every press in your plant. Get full details from your Dayco Representative or write Dayton Rubber Company, Dayco Div., Dayton 1, Ohio.



**The Dayco
Color Separator**

The Dayco Color Separator (only mechanical color separator made) eliminates expensive roller-cutting, reduces make-ready time and press time. Lets you print several colors—one time through the press—with splits as narrow as 1½" and no color mixing.



**The Dayco
Fountain Divider**

The ideal fountain divider for split color and all other fountain users, the Dayco Fountain Divider is absolutely leakproof, quickly installed, easily adjusted and cleaned. It is sturdily constructed for years of service. Fully Guaranteed.

Dayton 50 Years of Progress Rubber

Dayco Rollers . . . for Offset, Letterpress, Newspaper, Gravure, Analin, Coating, Graining, Steel Mills. Dayco Offset Blankets, Dayco Fountain Dividers, Dayco Color Separators.

West Coast Distributor, Tillicum Rubber Co., Lacey, Wash.

© D.R. 1956

THE DAYTON RUBBER CO.

Dayco Division, Dayton 1, Ohio

Tell me more! Send additional information about:

- Dayco Gold Seal Offset Blanket
- Dayco Roller
- Dayco Fountain Divider
- Dayco Color Separator

Name _____

Firm _____

Address _____

City _____ Zone _____ State _____

TABLE 1. SUMMARY OF SURVEYS MADE BY NAPL AND ALLIED RESEARCH BUREAU ON THE EXPERIENCE WITH MECHANICAL DAMPENER ROLLER CLEANERS.

	NAPL Survey Number	NAPL Survey Percent	Allied Research Survey Number	Allied Research Survey Percent
Consider it worthwhile (Good investment—ARB)	84	95	62	98
Find it a fair investment			1	2
Think it improves quality	82	93		
Think it lowers costs	77	87.5		
Does a good job			57	90
Does a fair job			6	10

TABLE 2. EXPERIENCE WITH MECHANICAL CLEANERS FOR BREAKING IN NEW OR RECOVERED DAMPENER ROLLERS AS VOLUNTEERED BY RESPONDENTS.

	NAPL Survey Number	NAPL Survey Percent	Allied Research Survey Number	Allied Research Survey Percent
Mentioned use for breaking in dampeners	14	16		
Gets rid of lint	7	8		
Smooth, uniform covers	4	4.5		
Do you use machine for breaking in new dampeners?			*56	*95
Mentioned good for breaking in new dampeners			17	27

* In reply to the specific question.

TABLE 3. IMPROVEMENT OF QUALITY FROM USE OF MECHANICAL ROLLER CLEANERS AS SHOWN BY WRITE-INS OF RESPONDENTS.

	NAPL Survey Number	NAPL Survey Percent	Allied Research Survey Number	Allied Research Survey Percent
Does a better job	19	22		
Produces smoother evener rollers	8	9	12	19
Takes out lint	7	8	3	5
Cleans better	5	6	23	37
Makes it possible to clean rollers oftener	2	2		
Better color work	1	1		
Doesn't disturb the nap			1	2

TABLE 4. LOWER COSTS FROM USE OF MECHANICAL CLEANERS AS SHOWN BY WRITE-INS OF RESPONDENTS.

	NAPL Survey Number	NAPL Survey Percent	Allied Research Survey Number	Allied Research Survey Percent
Lower costs	27	30		
Saves covering material	10	11	11	17
Saves time	27	31		
Works automatically to save labor time	10	11		
Saves cleaning time	6	7	11	17
Less time needed for recovering rollers because of longer life	5	6		
Less time needed for resetting presses	4	4.5		
Eliminates overtime for cleaning rollers	2	2		

that it is easier to clean by machine than manually. "It eliminates a messy, tedious job cleaning dampeners by hand," said one lithographer. Another stated simply, "It sure saves a lot of hard work."

Two Main Advantages

Generally, the reasons given for liking the mechanical cleaners can be grouped into two categories: (1) improved quality and (2) lower costs by decreasing press down time. The percentage of those in the association survey who named either or both general categories as reasons is shown in Table 1. Based on comments from respondents to both surveys, the two categories are broken down into more specific reasons in Tables 3 and 4.

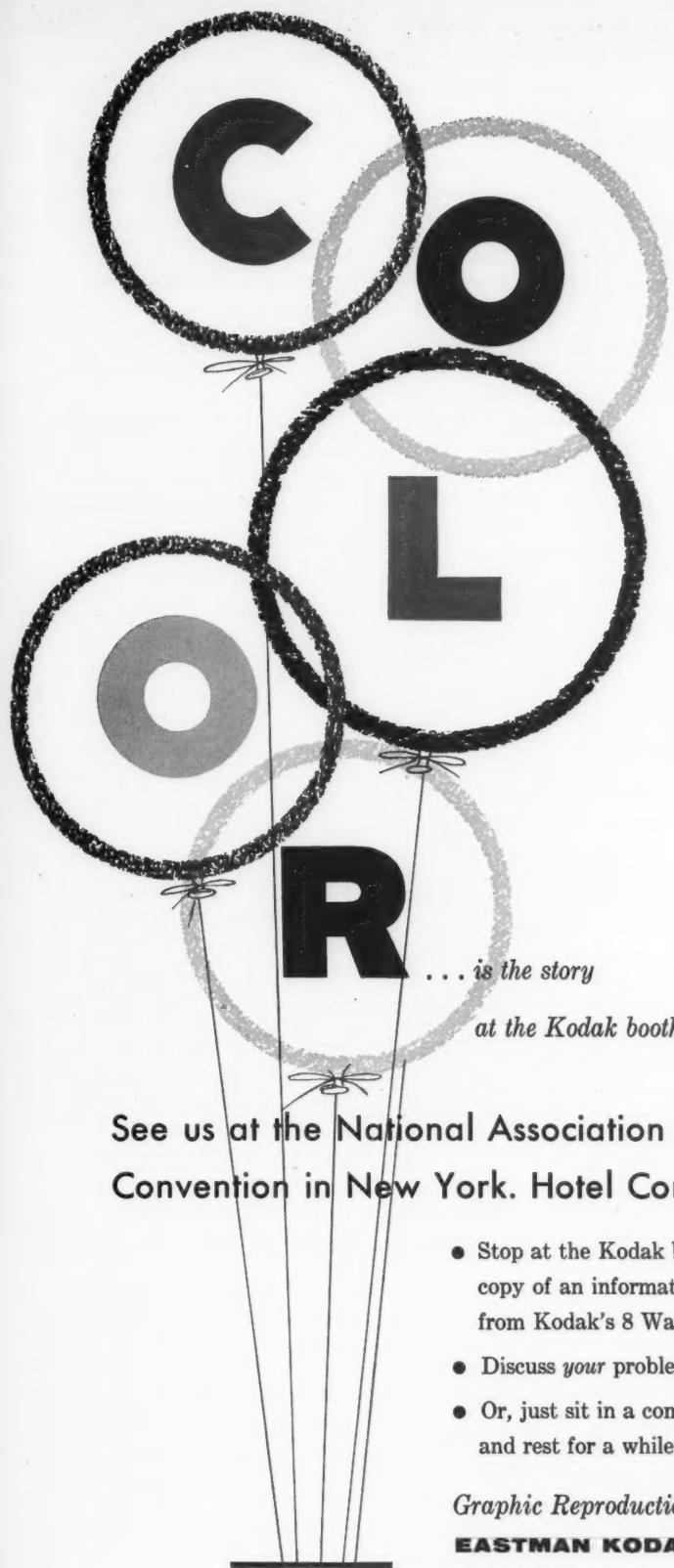
There can be no clear cut distinction between improved quality and lower costs as to which is the prime factor in the approval of mechanical cleaners because often one results from the other. For example, lower cost cleaning makes it feasible to clean dampener rollers more often, therefore improving printing quality. On the other hand, the uniform and gentle but thorough cleaning from mechanical cleaners prolongs the life of dampener covers and cuts both material costs and labor costs needed to recover rollers.

Improved quality also is related to the breaking in feature, because rollers broken in with mechanical cleaners are uniform and free of lint, Jomac has found. "Roundness of rollers adds to quality control," one lithographer stated. "Reduces make-ready time and helps reduce lint," commented another. "Makes dampener even and eliminates low spots," added a third.

In setting down the advantages of the roller cleaners, 37 percent of the respondents to the Allied Research survey said that they clean better. Closely related to this benefit is the fact that the machines make it economical to clean rollers oftener, resulting in cleaner rollers over a period of time.

Commenting on the equipment's cleaning ability, typical users say:

"*Rollers are cleaned more thoroughly. They are rolled out evenly —*



... is the story

at the Kodak booth (Nos. 57, 58, and 59) this year.

See us at the National Association of Photolithographers
Convention in New York. Hotel Commodore—Sept. 19-22.

- Stop at the Kodak booth and get your free copy of an informative new book titled "Reproduction from Kodak's 8 Ways to Color."
- Discuss *your* problems and needs with us.
- Or, just sit in a comfortable chair and rest for a while.

Graphic Reproduction Sales Division

EASTMAN KODAK COMPANY

Rochester 4, N. Y.

Kodak

*Reading
ML
on
Borrowed
Time
?

Why not
enter an
extra
Subscription
for your
plant so
you'll have
plenty of time
to read it
every month.*

giving a more uniform dampening surface and evener setting."

"We save a great deal of time otherwise consumed washing and recovering dampeners. Since we have a regular schedule for washing dampeners, our quality is greatly improved."

"Makes a better job than with a brush and cuts the time about two-thirds."

Statements of cost savings included both savings in material and in time (see Table 4). Investigations made by Jomac, Inc. confirm these statements by demonstrating that its roller cleaners increase dampener cover life 50 percent and save up to 15 minutes running time per day per press.

In the Allied Research survey, materials and time savings were cited in an equal number of instances. But in the NAPL study, time savings were listed more than twice as often as materials savings, indicating a deep concern with labor costs.

Time saved in actual cleaning of the rollers was only one of the factors in over-all time savings. The automatic feature of mechanical cleaners — the fact that rollers can be put in them and cleaned without any further attention while presses are washed up or other jobs performed — was mentioned most often in the association survey. The next most frequent comment was savings in actual cleaning time, followed by less time needed for recovering rollers (because of longer life of covers and the ability to break in new covers on the roller cleaners) and less time needed for resetting the presses.

Time-Saving

Some users cited multiple time-saving benefits. One commented "It saves washing and press time. We have been able to keep an extra set of dampeners washed and ready at all times. The washer has saved us a lot of downtime on the press and recovering time."

The high cost of skilled labor has made the automatic feature of mechanical cleaners particularly attractive to shop owners and managers. The following comments illustrate the satisfaction of being able to reduce

press downtime through mechanical cleaning of dampeners:

"It doesn't take a man away from a press to wash rollers, especially important when there is a shortage of personnel."

"Dampeners can be washed out at end of shift while press is being cleaned up."

"Before we had the machine it was often necessary to keep feeders on overtime to get them free from the press long enough to clean the dampeners."

"Once loaded with dampeners the machine runs itself while the men are working on the press."

Savings in actual cleaning time are typified by the remark of one user who said, "We save a great deal of time formerly consumed washing and recovering dampeners." Another estimates he saves 15 minutes per day on each press.

Recovering Time Cut

Because machine-cleaned roller covers last longer, recovering time is greatly reduced, Jomac points out. "Dampeners do not need to be recovered as frequently," commented one lithographer.

Savings in press resetting time were also mentioned frequently, often in conjunction with statements about the use of the mechanical cleaners to break in new or recovered rollers. Such comments as "new rollers are run in, saving resetting time," or "dampeners need not be reset after washing," were included on many of the survey returns, an analysis of the replies showed.

"We save considerable time since we don't have to replace covers as often," remarked one user. A second claimed a saving of more than 50 percent on material for dampener covers, a third stated flatly that his dampeners last three times longer and a fourth said that he now changes coverings every six weeks as compared to every two weeks formerly. Still another pinpoints the reason by saying, "Not as much covering time is needed because the machine does not wear out the nap like hand washing."★

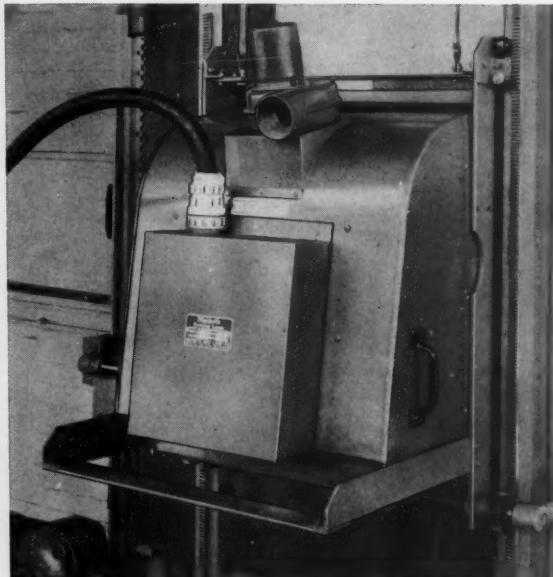


"It's like having an extra photo-composer!"

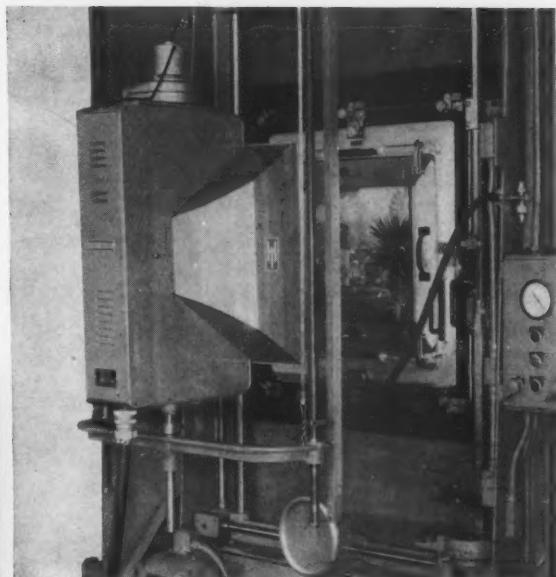
That's a lithographer's reaction to the reduction in exposure time he got when he equipped his photo-composing machine with a Macbeth Constantarc lamp.

Constantarc lamps. You see, he almost doubled his output, got work of consistent high quality, and practically eliminated remakes!

Macbeth Constantarc lamps permit the operator to devote all his time and attention to his work. There are no meters to watch or tap switches to fiddle with in order to compensate for line voltage fluctuations—this lamp actually is completely and constantly automatic-regulating.



This Lanston M-H Vertical Photo-Composing Machine is equipped with a Macbeth Constantarc B-1C-L printing lamp. The specially designed housing permits the lamp to be mounted directly on the photo-composer.



Here's a Macbeth Constantarc B-1C printing lamp on a Rutherford RM Photo-Composing Machine. A Constantarc is available for the Rutherford type PL photo-composer, also. Lamp shown has optional exhaust system.

There's a Macbeth Constantarc designed specifically for your photo-composing machine . . . designed to give you consistently uniform exposures from the first to the last with reductions in exposure time of 50% or more from exposures required with old-style lamps. What's more, there's a reflector designed for every chase size right on up to the largest to assure the maximum degree of evenness with the light confined to the desired area. This means light-loss is eliminated and maximum illumination assured. An exhaust system is available for cooling and to help eliminate dust problems.

Macbeth Constantarc printing lamps are available on 30 days free trial so you can prove for yourself how they can increase production and reduce costs. Integrated design and construction mean the Constantarc is easy to install on any type or size of photo-composer.

INSIST THAT YOUR NEW PHOTO-COMPOSER BE CONSTANTARC EQUIPPED! USE THE COUPON TO GET THE FULL STORY.

**MACBETH
ARC LAMP COMPANY**
141 Berkley Street, Philadelphia 44, Pa.

MACBETH ARC LAMP COMPANY
141 Berkley St., Phila. 44, Pa.

Tell me all the advantages of using a Macbeth Constantarc printing lamp on my photo-composer.

Here's the make, model, and size:

Name _____

Company _____

Address _____

City and zone _____ State _____

Testing Your Employes for COLOR APTITUDE

PRINTING and lithographing plants doing color work will have a better means of screening personnel for color aptitude, if a test devised by the Inter-Society Color Council continues to give good results in graphic arts plants.

The Inter-Society Color Council is composed of representatives of technical organizations in the textile, paint, ink, graphic arts and many other fields. Earlier this year ISCC devoted its annual meeting to a discussion of color problems that are pertinent to the graphic arts.

ISCC developed the color aptitude test to enable the industries that are vitally interested in color problems to screen their personnel, so that persons with best scores in the test can be placed in the most critical jobs.

Forbes Lithograph Mfg. Co., Chelsea, Mass., was one of the first graphic arts firms to try the test. Kenneth G. Scheid, of Forbes, in a 12-page report on the test, said his company attempted to validate the test last year using 61 plant personnel, later reduced to 38 for the key analysis. He reported that pressroom personnel were excluded from this initial study, and careful job analyses and supervisory ratings were prepared.

"Analysis of test scores and supervisory ratings indicates a positive correlation between the score level and the supervisor's rating for color matching performance on the job," the report stated. Helping Mr. Scheid with the test were Dr. Forrest L. Dimmick, Willard P. Greenwood and George S. Hammer, all of Forbes.

Summarizing the report, the author

asserted that "we have concluded that the test should help in predicting job performance and that a uniform minimum cut-off score of "satisfactory" is desirable. We intend to continue our experiment now with pressroom personnel, and we are anxious to see additive research reports from other printing organizations."

Following are excerpts from the Forbes report:

Good vision is a self-evident, vital requirement for most personnel in the printing industry. It has received in the past, and continues to receive, planned management attention in progressive printing companies.

Customarily, this attention has been directed to two measurements of vision for which established testing means, employed by the optometrist, exist:

1. Visual acuity, evaluated by regular screening, and the prescription of corrective glasses where needed.

2. Presence or absence of various types of color-blindness, determined generally by the use of pseudoisochromatic plates.

In a printing organization such as Forbes, which deals mainly in multi-color reproduction, as opposed to black-and-white, a third area of vision becomes particularly important — the ability of the employee to make rather fine color matching or discrimination judgments, rapidly and accurately. Multi-color pressmen, provers, ink color matchers, quality control inspectors and various department supervisors, for example, make these judgments continually in their control of colors. . . .

The color aptitude test, developed

by the Inter-Society Color Council since 1940, with F. L. Dimmick and C. E. Foss as Co-Chairmen of the Test Committee, and available in the 1952 Edition through its sponsor, the Federation of Paint and Varnish Production Clubs, has been offered to the industry to meet this need. As described in the manual, this test apparently is based on up-to-date professional concepts regarding the physical, physiological and psychological aspects of color discrimination. The test has been carefully developed by item analysis, statistically reliable standards have been presented and reliability has been determined as high. Research continues on these aspects.

Standard conditions are carefully prescribed for its administration. Since color matching is the way in which color aptitude is most frequently used, the test consists in having a subject make 40 independent color matches, using color chips which are matched one at a time with 40 identical chips mounted in rows of four basic hues (red, yellow, green and blue) on an easel-type panel. . . .

The basic objective of this study has been to determine whether the color aptitude test can assist a large multi-color printing organization in improving its color matching, color discrimination and color control, by means of improved placement of new or present employees. A useful measure of color aptitude can, of course, serve as only one of a number of criteria in evaluating new or present employees. Job analyses show clearly, for any position involving

(Continued on Page 165)



Oxford Papers

**HELP BUILD
SALES**



As the clock strikes one, Santa's helper is still all thumbs. But Mother smiles indulgently, anticipating Christmas morning and the irrepressible excitement of children.

Heralding the Christmas season are the glamorous gift catalogs of manufacturers and retailers. The fine creative work which goes into their preparation is vividly brought to life by the superior printability of Oxford Papers. Advertisers and printers know they can depend on Oxford for uniform, high quality. For specific examples, call your nearby Oxford Merchant or write us direct.

**OXFORD
PAPERS**

**This insert is a sample
of the offset results
you can get on**

FENWICK SUPERFINE OFFSET, a recent addition to Oxford Papers, is a premium grade of outstanding quality and appearance. It is film-coated paper, highly pigmented for added brightness and opacity. It is also super-calendered to a high glossy finish. Fenwick Superfine is admirably suited for black and white or multicolor offset printing, especially for subjects containing sharp details and reflective surfaces such as jewelry, glassware or appliances.

WESCAR SATIN PLATE OFFSET is a film-coated, pigmented paper of high brightness and opacity with dull satin finish. It is also designed for black and white or multicolor offset printing, and will give soft, pleasing results in clear detail for a wide range of subjects.

WESCAR GLOSS PLATE OFFSET, a companion sheet to Wescar Satin Plate, is also manufactured with a pigmented coating film super-calendered to a high gloss finish. It lends luster and detail to offset printing in either black and white or multicolor.

TWO VALUABLE AIDS: (1) *The OXFORD PAPER SELECTOR CHART* helps you select the right grade of paper for each job. (2) *The OXFORD PAPER COST CALCULATOR* quickly gives the exact cost per 1000 sheets for common weights and sizes of printing papers. Ask your nearby Oxford Merchant or write us direct.

Nation-wide Service

Through Oxford Merchants

Albany, N. Y.	W. H. Smith Paper Corp.
Asheville, N. C.	Henley Paper Co.
Atlanta, Ga.	Wyant & Sons Paper Co.
Augusta, Maine	Carter Rice Storrs & Bement
Baltimore, Md.	The Mudge Paper Co.
Bethlehem, Pa.	Wilcox-Walter-Furlong Paper Co.
Boise, Idaho	Blake, Moffitt & Towne
Boston, Mass.	Carter Rice Storrs & Bement
Buffalo, N. Y.	Franklin-Cowan Paper Co.
Charlotte, N. C.	Henley Paper Co.
Chicago, Ill.	Birmingham & Prosser Co.
	Bradner, Smith & Co.
	Marquette Paper Corporation
	Midland Paper Company
	The Whitaker Paper Co.
	The Johnston Paper Co.
	The Whitaker Paper Co.
Cincinnati, Ohio	The Cleveland Paper Co.
Cleveland, Ohio	Graham Paper Co.
Dallas, Texas	The Whitaker Paper Co.
Dayton, Ohio	Birmingham & Prosser Co.
Des Moines, Iowa	Chope-Stevens Paper Co.
Detroit, Mich.	Blake, Moffitt & Towne
Fresno, Calif.	Henley Paper Co.
Gastonia, N. C.	Green & Low Paper Co., Inc.
Hartford, Conn.	Carter Rice Storrs & Bement
High Point, N. C.	Henley Paper Co.
Indianapolis, Ind.	MacCollum Paper Co.
Kalamazoo, Mich.	Birmingham & Prosser Co.
Kansas City, Mo.	Graham Paper Co.
Knoxville, Tenn.	Louisville Paper Co.
Little Rock, Ark.	Roach Paper Co.
Long Beach, Calif.	Blake, Moffitt & Towne
Los Angeles, Calif.	Blake, Moffit & Towne
Louisville, Ky.	Graham Paper Co.
Lynchburg, Va.	Louisville Paper Co.
Manchester, N. H.	Caskie Paper Co., Inc.
Memphis, Tenn.	C. H. Robinson Co.
Milwaukee, Wis.	Louisville Paper Co.
Allman-Christiansen Paper Co.	Allman-Christiansen Paper Co.
Sensebrenner Paper Co.	Sensebrenner Paper Co.
Wilcox-Mosher-Leffholm Co.	Wilcox-Mosher-Leffholm Co.
Graham Paper Co.	Graham Paper Co.
Bulkeley, Dunton & Co., Inc.	Bulkeley, Dunton & Co., Inc.
Carter Rice Storrs & Bement	Carter Rice Storrs & Bement
Graham Paper Co.	Graham Paper Co.
Baldwin Paper Co., Inc.	Baldwin Paper Co., Inc.
Bulkeley, Dunton & Co., Inc.	Bulkeley, Dunton & Co., Inc.
Green & Low Paper Co., Inc.	Green & Low Paper Co., Inc.
Kennedy Paper Co., Inc.	Kennedy Paper Co., Inc.
The Whitaker Paper Co.	The Whitaker Paper Co.
Blake, Moffit & Towne	Blake, Moffit & Towne
Western Paper Co.	Western Paper Co.
Carter Rice Storrs & Bement	Carter Rice Storrs & Bement
Atlantic Paper Co.	Atlantic Paper Co.
Wilcox-Walter-Furlong Paper Co.	Wilcox-Walter-Furlong Paper Co.
Blake, Moffit & Towne	Blake, Moffit & Towne
Brubaker Paper Co.	Brubaker Paper Co.
General Paper Corp.	General Paper Corp.
C. H. Robinson Co.	C. H. Robinson Co.
Blake, Moffit & Towne	Blake, Moffit & Towne
Blake, Moffit & Towne	Blake, Moffit & Towne
Cauthorne Paper Co.	Cauthorne Paper Co.
Genesee Valley Paper Co.	Genesee Valley Paper Co.
Blake, Moffit & Towne	Blake, Moffit & Towne
Birmingham & Prosser Co.	Birmingham & Prosser Co.
Graham Paper Co.	Graham Paper Co.
Shaughnessy-Kniep-Hawe Paper Co.	Shaughnessy-Kniep-Hawe Paper Co.
Tobey Fine Papers, Inc.	Tobey Fine Papers, Inc.
Blake, Moffit & Towne	Blake, Moffit & Towne
Blake, Moffit & Towne	Blake, Moffit & Towne
Blake, Moffit & Towne	Blake, Moffit & Towne
Blake, Moffit & Towne	Blake, Moffit & Towne
Blake, Moffit & Towne	Blake, Moffit & Towne
Mill Brand Papers	Mill Brand Papers
Blake, Moffit & Towne	Blake, Moffit & Towne
Blake, Moffit & Towne	Blake, Moffit & Towne
Paper Merchants, Inc.	Paper Merchants, Inc.
Blake, Moffit & Towne	Blake, Moffit & Towne
John Floyd Paper Company	John Floyd Paper Company
Carter Rice Storrs & Bement	Carter Rice Storrs & Bement
The Mudge Paper Co.	The Mudge Paper Co.



Proudly Presents



The Most Important Advance in Printing Ink Service Since Printing Ink Was Invented

Crescent's Spectrum Service is created to reduce your costs, save you money, and make your work more profitable for you. It gives you all the advantages of complete custom ink service plus the economies of mass production. With Crescent's Spectrum Service you gain these advantages:

1. **It Saves Time.** Press down-time is reduced. Waiting for color okay is practically eliminated. There are no delays for ink at critical moments.
2. **It Saves Money.** Crescent's Spectrum Service uses a small assortment of carefully selected inks to cover 95% of the presswork in most shops.* You buy and stock them in the best economic units for your needs, at the best quantity prices. Purchases of small expensive trial batches are discarded. But most of all, faster press preparation and less down-time save real money.
3. **It Saves Material.** The proper amount of ink is always on hand or easily prepared. No overestimates are necessary—and that means no dead inventory on your shelves.
4. **Our Knowledge and Experience Is Added to Yours.** This builds "know-how" and flexibility in your organization—a valuable plus asset.
5. **It Enables Better Planning and Production Control.** With all operations under your control, planning and production are more easily handled. If you would like to know more about Crescent's Spectrum Service sign and return the coupon. We will send you a brochure giving complete details. No obligation, of course . . . but we think you will find Crescent's Spectrum Service mighty valuable for your plant!

*These Inks Contain Du Pont Valron

CRESCENT INK & COLOR COMPANY
464 N. 5th Street, Philadelphia 23, Pa.

Your Crescent Spectrum Service sounds like a genuine money saver!
Without obligation please send us the brochure giving full details.

Name.....
Position.....
Company.....
Address.....
City.....
Zone..... State.....

FOR BRILLIANT LABEL WORK
Select M-J OLD TAVERN metallic paper...
and you start with the best!



1903 Ford Model "N" Runabout. An ancestor of Model "T". 4 cyl., 17.82 H.P., Disciplinary Transmission, 84 inch wheel base.

You'll discover M-J Old Tavern metallics are highly resistant to rubbing and have a beautiful sheen. They print exceedingly well and give sparkling results with line and halftone work by letterpress or offset. They're ideal for silk screen printing, too.

Because M-J Old Tavern metallics print as well as any coated sheet, they are your answer to quality cover, label, seal and box work. You also add a touch of eye-catching distinction to menus, invitations, announcements and more when you begin the job with M-J Old Tavern metallics.

M-J Old Tavern gold and platinum label papers are available with water soluble, heat seal or dry-stik gumming, as well as unguaranteed in label and weight.

The Sign of the Most Complete Label Paper Line.

**50 YEARS IN AMERICA
100 YEARS OF EXPERIENCE**

M-J
LABEL PAPERS

AURIN-ANGER COMPANY Address inquiries to Stockfield Sales Office, Brockfield, New Jersey. QUARTERS: Needham Heights 94, Mass.; MILLS: Brockfield, Worcester, Birmingham, Kent, Newark, N.J.; OFFICES: New York, Chicago, Cincinnati, Los Angeles. Instantaneous & Delayed Action HEAT SEAL • M-J GUARANTEED PLATINUM • M-J SELF-ADHESIVE DRY-STIK • M-J WARETONE • M-J PLATED • M-J OLD TAVERN.

on M-J OLD Tavern Gold Label Weight by arrangement with Lewis Papers Inc.

SPECIAL ADHESIVES*

McLaren-Angus develops its own adhesives to meet the rigid requirements of today's high-speed, close-tolerance labeling.

If you want an adhesive to answer a specific problem contact your paper merchant. He'll get in touch with us and our adhesive specialists will arrange a meeting at your convenience.

Send for free 8" x 12" reprint of antique car suitable for framing.

Training for the lithographic industry:

what the offers

By **Charles Shapiro***

Educational Manager

Lithographic Technical Foundation

ANYONE producing printing has had the experience of trying to sell the buyer on the cost of, and the time consumed by, preparatory work. The consumer can see the paper, recognize that there is ink on it, and even possibly appreciate that a press must be used to produce his material. And he recognizes, in this day and age, that all of these things cost money. But the preparatory work in many cases just isn't appreciated.

We have a similar situation with respect to training. I think everybody recognizes that we need students to train, trainers to do the training, and facilities — whether in-plant or school. But very few appreciate, until it is called to their attention, the amount of preparatory work that must be done, and material that must be produced, before any training is accomplished.

This can be likened to something as obvious as your job ticket or jacket. If you will agree that training is instructing someone how to do something, then your jacket is also an instructional piece, very carefully prepared, telling your people how to produce a certain job. To do training, such pieces of instructional material must be prepared for each bit of learning, whether it be mental knowledge or manual skill. Each set of pieces must be individ-

Charles Shapiro



The work of the Lithographic Technical Foundation is widely-known in the industry. However, ML feels that this explanation of how and why the training materials are developed, and how they are used, will shed some light on the very complex job of producing them, and will remind readers of the valuable work their industry's research foundation is doing.

ually prepared for every item to be learned, regardless of how small or seemingly insignificant.

Long, Tedium Job

This is a very long, tedious job. As a matter of fact, in teacher-training institutes, a prospective teacher of a trade subject spends more than half his time, while preparing to teach, just learning how to do this one thing.

Here is where the lithographic industry has accomplished something which no other industry has yet done. That is, as a cooperative effort, the industry has seen to it that this laborious and costly job of preparing the necessary teaching materials has been accomplished for most job classifications. Further, it has done this in such a way that almost any

type of training need can be met merely by shuffling the existing material.

The Lithographic Technical Foundation has produced a library of 20 courses. We call these *Complete Course Teaching Materials*. In their basic form they are best suited for school and formally set-up in-plant training programs.

20 Courses

These materials include photography in three courses: line photography; halftone photography; and color separation photography. There is one course in black and white stripping. A course in color-stripping is now in preparation. Tone and color correcting originally was handled in three volumes: opaquing; retouching; and dot etching. A new course now in preparation will combine retouching and dot etching in one volume.

There are two courses in plate-making: surface and deep-etch. Pressmanship is set up in four courses: Press I—preparing and starting the press; Press II—adjusting and running the press; Press III—press troubles; and Press IV—technical. A course also is available for training in photo-composing.

In addition to these Skilled Craft Courses, there are Special Subjects Courses. They are *Survey of Lithography*; *Chemistry for Lithographers*, Vol. I (Vol. II is in preparation, as is a course in the chemistry of lithography); *Estimating—Black and White*, and *Estimating—Color*. These latter two will be permitted to go out of print since it is felt that the

(Turn to Page 89)

* From a talk given at the 51st annual LNA convention, May 10, at the Drake Hotel, Chicago.



**..Get in line with the Consolidated Line...
and you can be sure that you have the finest..
and the fastest equipment that money can buy
and the greatest return on your Investment!**

The Consolidated Organization is constantly designing, developing and making available to the Graphic Arts Industry equipment that will do a better job, do it quicker and at a minimum of capital investment.

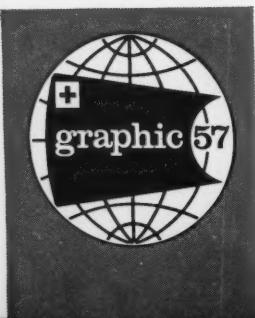
Consolidated is recognized as the Originators and Designers of the modern Reproduction Camera and has gained its leading position through the development of equipment that produces better work in less time. Its line of Printing

the Consolidated International Line

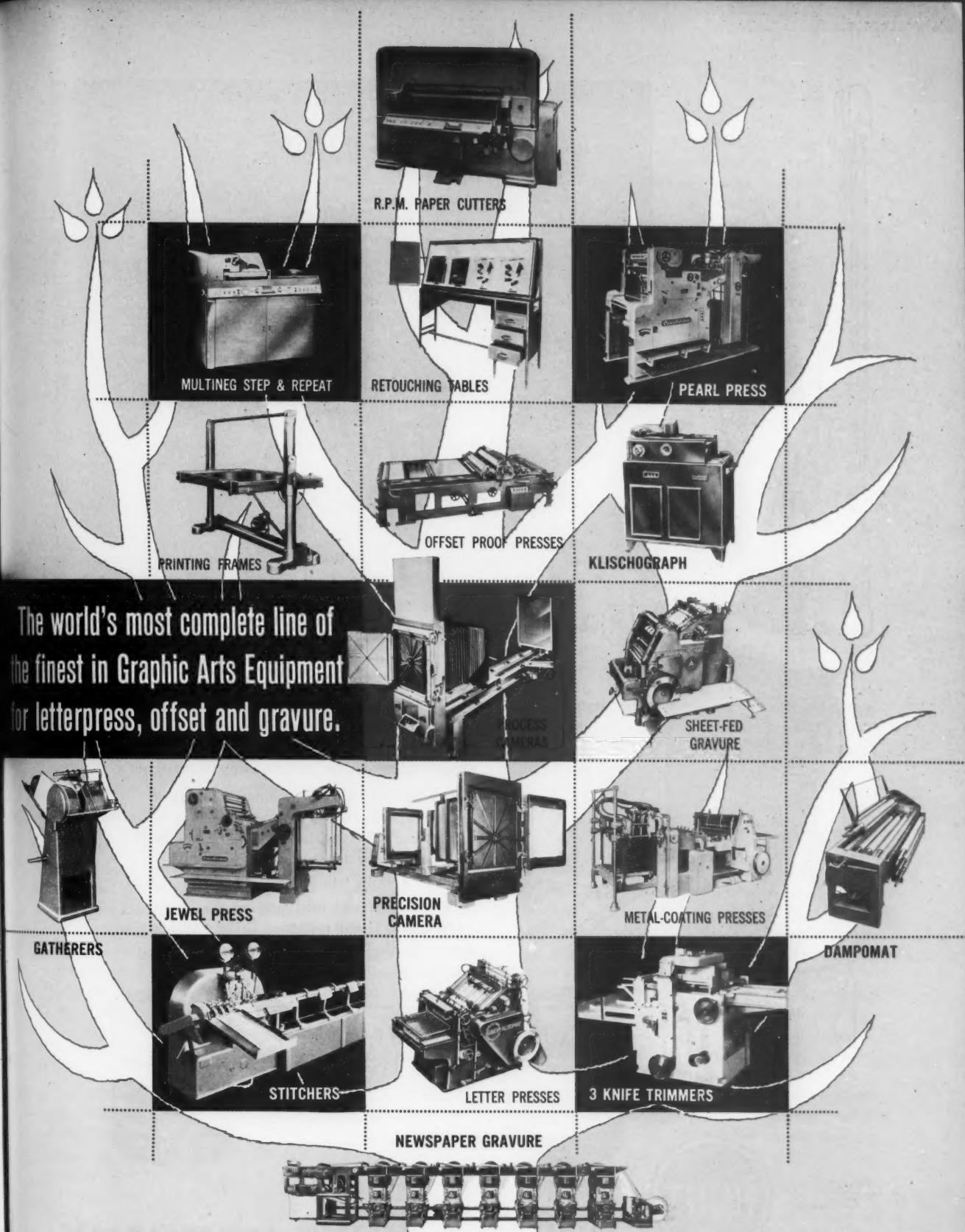
and Bindery equipment, from the leading plants of Europe, makes available the finest equipment the world has to offer. Consolidated factory trained personnel work with industry to get the most production and the most efficient operation. Whether it's a single part or a complete plant, Consolidated's Service Organization plays the important part of setting up your equipment and servicing your every requirement to keep the presses rolling at all times. A complete staff is available, strategically located to give the quickest service possible.

Consolidated equipment is so designed that improvements and developments can be added, when available, to keep your installation modern and abreast of the times for many years to come. Our policy . . . that Consolidated equipment must be the best, and that nothing less will do . . . is your assurance of better equipment and increased production.

INDEX OF CONSOLIDATED EQUIPMENT SHOWN IN THIS ISSUE OF ML



Pearl "25" Announcement	Page 9
Consolidated Mailander Proofing Press	Pages 32, 33
Consolidated Pearl in Milwaukee	Pages 98, 99
Consolidated RPM Paper Cutter	Page 114



CONSOLIDATED INTERNATIONAL equipment and supply company

1112 N. HOMAN AVE.

CHICAGO 51, ILLINOIS

Phone BRUNswick 8-4000

330 W. 26th ST. NEW YORK 1, N.Y.
PHONE ALGONQUIN 5-4950

1430 VENICE BLVD. LOS ANGELES 6, CAL.
PHONE RICHMOND 8-3806

1190 BENNINGTON ST. EAST BOSTON 28, MASS.
PHONE EAST BOSTON 7-2921



"Our platemaker
hasn't asked me for a
makeover since I
switched to
**Hunt ENGRAV-O-GRAPH®
Developer"**

You can always recognize an Engrav-O-Graph halftone by its distinct, sharply defined dot formation and absence of halation.

You'll find that with Engrav-O-Graph, makeovers are a rarity. That your work is easier, faster, more productive, because its maximum contrast developing properties remain for its entire tray life.

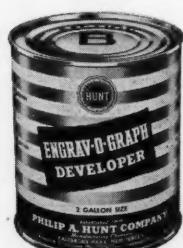
Test it for those hard clean dots—the mark of a perfect halftone. Test it for its absence of halation. Test it and you'll find too that Engrav-O-Graph halftones can be dot-etched with no risk of sudden "graying-out."

Only you can be the final judge on the quality of Engrav-O-Graph negatives. Order a trial carton from any Hunt Branch. Do it today.



Hunt ENGRAV-O-GRAPH Developer
comes in cartons of:

12—2 gal. sets 1—25 gal. set
4—10 gal. sets 1—50 gal. set.



*Manufacturing
Chemists*



*Established
1909*

PHILIP A. HUNT COMPANY
PALISADES PARK, N. J.

Chicago • Cleveland • Cambridge • Brooklyn • Atlanta • Dallas • Los Angeles • San Francisco

Foundation should not be involved in that type of training. In addition to these we completed, in 1955, the course for The Science of Physics in Lithography.

Each of these complete courses is divided into from 15 to 33 separate lessons. For example, Pressmanship for Offset Lithography, Vol. II, titled, "Adjusting and Running the Press," is covered in 19 lessons.

Here is how the Foundation has prepared the course for both the instructor, who in all probability has not had teaching experience, and the apprentice. Keep in mind these courses have been devised for full time, part time—day or evening, refresher or up-grading use.

How the Course Is Laid Out

First there are *Instructions to the Teacher*. These are detailed instructions on the use of each segment of the course material. There is a *Textbook*. Both student and teacher work from this clearly written and illustrated text. The student can work from it on his own, but it is expected that the instructor will go into greater detail by drawing on his own experience and knowledge. The *Text Supplement* ties the training material pattern to the particular subject.

An *Instructor's Manual* guides the teacher in accepted and approved teaching techniques and gives to the practical plant-man constructive help in how best to impart his own knowledge and skill to others. The *Special Supplement to the Instructor's Manual* relates this manual to the particular subject matter being taught. Then there is the *Course Outline*, which is a breakdown of the course into teaching units. It shows the things an apprentice *must know* and *must be able to do* at the end of each of the 19 lessons.

For example, at the end of Lesson 9, which covers "Setting the Ink Fountain," an apprentice must *know*: How to align blade with fountain roller; how to adjust zero setting; how to judge plate for ink coverage; how to adjust first approximate setting; how to use the "count the turns" method. He must be able to *do* the following: Set fountain to zero set-

ting; estimate ink demand of the plate; decide a number of turns per screw; make first setting and ink up; run try sheet and examine; make necessary readjustments.

Setting this down in a compact outline serves to keep the instructor on the beam. There is little chance of his wandering off someplace into left field.

The *Lesson Plans* outline the method and procedure of conducting each lesson which may be a lecture or demonstration, or both. They show what items and equipment must be on hand; suggest questions that should be asked to determine if the students have retained a previous lesson. They explain when and what to demonstrate, and how to keep the slow learners up with the rest of the class. They also make suggestions for checking of the student's work—all-in-all, a complete "teacher's helper."

Set of Job Sheets

Each student receives a set of job sheets which are detailed directions that outline specific operations to be performed during each lesson. This *learning-by-doing*, under the direct supervision of craftsmen, and aided by an easy to follow text, brings the student a long way towards becoming a craftsman himself.

The *Reading References* are a suggested list of additional books that will assist the instructor in a fuller understanding of his subject. Students also are encouraged in this outside reading. We think that this is fairly complete and, judging by the results in schools and plants that have used the "Complete Course Teaching Materials," they agree.

But, as complete as it is, about seven years ago we realized that there was still another area we were not reaching. As previously stated, the material just described was planned for schools and formal in-plant programs.

For Smaller Plants

The smaller plants, not located near any of the available training facilities, were to all intents and purposes neglected, and, after all, their need for

trained manpower was no less acute than in the larger cities. We set out to devise a training program for those plants where even one apprentice, working under a skilled craftsman, could have the benefit of a planned program to help meet their skilled needs.

We took the complete course teaching materials, reassembled and added something to them. We call them the "Self-Teaching Kit." We wish they were completely "Self-Teaching," but frankly that, so far, seems impossible. However, this kit is the next best thing.

The only outside help a trainee needs is very little more than the craftsman or supervisor must give to his helpers and apprentices, under normal working conditions. This learning of a new aspect of his work can proceed rapidly and in an orderly way. By following the outline and doing each job as it is laid out—that is, the easiest first, then something slightly more difficult, and so on until he has gone completely through the course—the trainee will have gained a full apprenticeship. All these jobs are, of course, done under the supervision of a journeyman.

The self-teaching material has separate student's and supervisor's kits. The trainee's packet—we label it the "Self-Teaching Kit"—contains a copy of the text with all the necessary training material. This training material includes a set of study guides which summarize the text and require the learner to answer a group of long-answer questions. Also included in the packet are sets of job sheets and short-answer tests.

The supervisor's kits also contain a copy of the text. With this is a course outline and a set of the short-answer tests with the answers filled in.

This self-teaching material has been prepared for each course in our library of complete course teaching materials. The self-teaching kits also are very useful in an apprentice school or formally set-up in-plant-training programs.

All of our courses have been designed and written by outstanding
(Continued on Page 161)

"...on behalf of Laurel, accept our thanks..."

OFFSET LITHOGRAPHY AND LETTERPRESS PRINTING SINCE 1912
601 WEST 26th STREET • NEW YORK 1, N.Y. • TELEPHONE WATKINS 4-5600



March 6, 1956

Mr. Walter E. Soderstrom
National Association of Photo-Lithographers
317 West 45th Street
New York 36, N.Y.

Dear Walter:

All too often during the course of a normal business day, we take so many things for granted.

On the desk of most lithographic executives appears reams of trade material which he somehow must or should find time to read. One would believe just by glancing at this volume of material that the printing business is booming beyond our wildest expectations. Each of these pieces tells us to do this or change policy to a specific course with dramatic results. Alas, we in the trade know so differently. Nothing substitutes for hard-punching-selling and the awareness of accurate cost system.

One trade bulletin which I never miss reading, even though I may carry it home with me, is the NAPL Newsletter. For me and our business, this contains more direct and succinct information than any other. While reading a recent NAPL Newsletter at home my eyes ran across a suggestion which appeared so simple that it was incredible for me not to have thought of it. The fact is that despite my many years in business Laurel was not using your idea.

We have since adopted this procedure and I am most happy to tell you, Walter, that it has resulted in substantial savings to us in one phase of our operation. We cannot yet measure the total savings because we have only utilized this idea for two months, but it appears that it will even exceed our normally conservative estimates.

I like the NAPL because it interprets the lithographic business in terms of a lithographic executive. There is enough meat not to go hungry and enough spice to try out new recipes.

On behalf of Laurel accept our thanks for the splendid work you and your staff are doing.

With kindest personal regards,

Yours cordially,
Bernie
LAUREL PROCESS COMPANY, INC.

Bernard Grossman

BG/mfl

NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS
317 W. 45th STREET, NEW YORK 36, N.Y.

- Please send me complete information about membership in the association. Send us copies of your bulletins.

Name

Company

Address

City Zone.... State.....

You and your company will be just as enthused about the services N.A.P.L. Find out how can benefit by membership in this fast growing association. Use the coupon below.

DURING the rather trying days of 1933, after the National Industrial Recovery Act had set the wave of industry code activity in motion, it seemed for a time that photo-lithography might get lost in the commotion that attended adoption of industry codes and selection of code authorities. As was common in so many fields, various existing graphic arts trade groups took the initiative to speak for their particular branches of the industry, and in some cases for other closely associated groups as well. Photo-lithography was as yet unorganized. There was no association of photo-lithographers to speak for this growing branch of the lithographic industry, which was a rather bad spot for this youngest division of the graphic arts to be in during the general scramble for position and authority under the rapidly developing system of industry codes and code authorities.

The long-established, larger lithographic firms had a strong association (the Lithographers National Association) efficiently managed by my old friend, Maurice Saunders, but understandably they had little real concern or direct connection with the problems of small producers of black and white lithography.

Sought NRA Code Authority

The only existing organization of photo-lithographers was a local group which we had formed ten years earlier in Washington, D. C. Casting around for something to which we could hitch a claim before the N.R.A., it occurred to me that our local organization might be used to give us an organization name which we could use in appearing before N.R.A., where some evidence of valid right to speak for at least a section of one's industry was absolutely vital.

At this juncture it would be an unforgiveable omission if I should forget the activities of our wonderful and loyal friend, Louis B. Montfort, a lawyer by profession, who had considerable experience in trade association work. Captain Montfort had been chosen, some years before 1933, to keep our local Washington lithographers on speaking terms with one another.

As we dug into the problems which faced us under N.R.A., we found that things were moving rather rapidly—and in a direction that did not particularly meet with our approval. We received information that a meeting had been called in New York, under whose sponsorship I do not remember. Captain Montfort suggested that

the local Washington litho group chip in and send me to attend this meeting to observe and report developments. I believe Congressman Celler of New York was moderator. There I met George Loder and several other lithographers who were producing a considerable volume of black and white lithography at that time.

Hearings to decide who should serve on the Lithographic Code Authority were held for a number of weeks. At every such hearing our friend Captain Montfort represented us with vigor and considerable success.

Many of the original NAPL members will remember Captain Montfort as an extremely able advisor and the many hundreds of hours of service he gave to our cause were contributed without thought of any charge being made. He was the type man that few people have the good fortune of having as their friend. I am happy that good fortune was mine.

Major Kirby, Captain Montfort Help

During these hearings another good friend, Major W. W. Kirby of Kirby Lithography Co., joined Captain Montfort and me in making real efforts to obtain at least an administrative authority for photo-lithography under the code adopted for the lithographic industry. Major Kirby contributed considerable time and effort to this work and we were rewarded with an administrative authority.

Finally, after all the lengthy deliberations in so many different industries, and the major time and effort that went into them, the National Industrial Recovery Act was invalidated by decision of the Supreme Court—and the whole pack of industry codes and code authorities was thrown out the window. But let no one tell you that it was all in vain. Much was learned from the many meetings with our fellow graphic arts members.

Toward the end of those hearings, it occurred to me that a permanent photo-lithographic organization was needed. There was a real need to compile factual information on methods and procedure in producing photo-lithography. Apparently many in the field were producing jobs of undependable quality, because there were no uniform production methods. The buyer was never quite certain what he might receive in the way of a finished job, and this uncertainty seemed to be shared by the photo-lithographer as well. No interchange of informa-

(Continued on Page 157)

NRA . . . Captain Montfort . . . Major Kirby . . . Walter Soderstrom . . . George Loder played big part in

Early Days of NAPL

By Paul A. Heideke

President, Washington Planograph Co., and First President, NAPL



Technical SECTION

Brush Graining Lithographic Plates

By J. L. Heal

Lithographic Technical Foundation

SOME time ago, the Air Force asked the LTF Research Department to work on a new method for graining for surface plates. They didn't want to have to transport heavy, conventional graining equipment in field operations.

At that time LTF had already developed a technique for producing deep-etch plates on ungrained zinc and aluminum. And, we believed that we could also develop a way to make surface plates on a similar ultrafine grain.

In our first work on the problem, we tested three different manual methods of graining. We applied abrasive and water to the plates and then rubbed them with either a wad of cotton, a tampico hand brush, or a deep-etch pad.

Over a period of time, we found that the type of "grained" surface produced by these methods varied between operators. Sometimes the grains were scratchy and uneven. Also, manual graining was hard work, especially when regraining.

We then experimented with three mechanical methods: (1) Use of an orbital, hand-held sanding machine using both an abrasive cloth and a felt pad with abrasive sprinkled on the plate; (2) use of a five inch diameter brush attached to a flexible shaft and powered with half horsepower motor, and (3) a direct driven mo-

torized rotary 8 inch brush unit (polishing machine). The machines all were used with abrasive and water sprinkled on the plate.

The sanding machine didn't work. It tended to scratch and the finished surfaces were uneven. Results with the last two methods were satisfactory so we continued to work with them.

A series of tests was made with four abrasives and seven kinds of brushes. The abrasives included pumice, aluminum oxide, silica sand and quartz. The brushes were made of (1) tampico, (2) palmetto, (3) basimine, (4) union-mix, (5) nylon, (6) nylon-brass and (7) brass wire.

After many experiments on different sizes of test plates, the best abrasives were found to be FFF pumice and #500 aluminum oxide. Best brushes were those of tampico or nylon. Of these, nylon is the more practical because it outwears tampico by five to seven times and costs only two to three times as much.

The quality of work produced by the two methods of powering the brush is equal. We prefer the direct drive machine at LTF because it is easier to handle.

Procedure

Brush graining a plate is easy and fast. The plate is laid in the sink or in a large box with sides. It is then

wet with water. A little wetting agent is added and the abrasive is sprinkled over the plate. The brush is then placed on the plate and worked back and forth and sideways until an even matte finish is produced. You can grain a new 26 x 31 inch plate in three to five minutes.

The way to tell if the graining is satisfactory is to flush the plate with water, wipe off the excess, and then inspect the surface. It should look evenly matte overall. If it doesn't, more abrasive should be applied and the brushing repeated.

The wetting agent can be any non-abrasive detergent. It can be mixed into the water, or, if it is a dry powder, with the abrasive. If the plate is not to be made immediately, dry it as quickly as possible using a fan and/or heat.

For regraining surface plates, the steps are just the same except that it takes longer. Brush regaining a brush-grained 26 x 31 inch plate takes 10 to 12 minutes. It takes 15 to 18 minutes to brush regrain a tub-grained surface plate. When regaining plates, it helps to soak them in a 5 to 10 percent sodium hydroxide solution for a few minutes before you start. Aluminum oxide seems to do a better job than pumice for regaining.

Aluminum is easier to brush grain than zinc. Zinc tends to polish. More

You can get it all from Mead—*Papermakers to America*



Printers Find Mead Correspondence and Office Papers Handle Well and Sell Well

Every printer knows how important it is to keep presses running smoothly and to avoid unexpected shutdowns. He knows, too, the importance of providing customers with business letterheads and office forms that reflect quality and character, yet sell at competitive prices. You have assurance of all these things when you buy and sell Mead Business Papers. The success of this line over the years and the growing demand for each of the famous papers in the line today are substantial evidence of the quality and

printability that are built into them. They are the business papers made expressly for the printer and businessman who want the best for letterheads, invoices, bookkeeping forms, mimeographing, duplicating and similar purposes.

Mead Business Papers are mill-conditioned and come to you sealed in the famous Mead moistureproof, innerwrap package which protects right up to press time. Always available, they are standard products of The Mead Corporation.

Correspondence and Office Papers by Mead

- Mead Bond
- Mead Mimeo Bond
- Mead Ledger
- Mead Duplicator
- Mead Opaque
- Moistrite Bond
- Moistrite Mimeo Bond
- Moistrite Ledger
- Moistrite Duplicator
- Northlite Mimeo Bond
- Northlite Duplicator

Ask your Mead Merchant for samples
of these famous papers

MEAD
papers

THE MEAD CORPORATION

Papermakers to America

Sales Offices: Mead Papers, Inc., 118 West First Street, Dayton 2, Ohio
New York • Chicago • Boston • Philadelphia • Atlanta

MORE FOR YOUR DOLLAR

BEST
FOR
YOUR
NEGATIVES

CHEMCO'S POWER-FIX

Chemco's pre-mixed Power-Fix assures bringing your negatives as close to chemical perfection as possible . . . uniformly clears negatives 3 times faster and lasts days longer than conventional "hypo" baths. Simple and quick to put to work — Just add 3 parts water to 1 part Power-Fix, plus 2-4 ounces Chemco Film Tempering Solution per gallon working bath . . . that's all! It eliminates messy, cumbersome weighing and mixing.

Power-Fix doesn't corrode stainless steel or porcelain, adding years of service life expectancy to your darkroom sinks.

Chemco's new easy-to-store, easy-to-pour Power-Fix 5 gallon non-return container provides quantity purchasing economies — saves you extra expense and nuisance of returning empty carboys for refund. It's so economical — so easy to use — open and pour — recap and store — Chemco's POWER-FIX. Orders filled from all Chemco branch offices and warehouses.



. . . in Chemco's new
5 gallon "money-saver"
container

*if it's Chemco
it's best
for platemaking*



PHOTOPRODUCTS COMPANY, INC. GLEN COVE, N. Y.

ATLANTA BOSTON CHICAGO DALLAS DETROIT NEW ORLEANS NEW YORK

frequent additions of water, wetting agent and abrasive are needed during the graining of zinc to avoid this. A tub grained zinc plate that has been brush regrained looks very good. It has an appearance similar to brush grained aluminum plates.

Surface Platemaking Procedure

Because of the fineness of the grain, a few slight changes are required in the platemaking method. Briefly, the correct platemaking method that LTF recommends is as follows:

1. *Counter-etch.* Same as for tub grained plates.
2. *Pre-treatment.* (Cronak on zinc, Brunak on aluminum.) Use only for casein coatings and only if coating tends to lift off during development.

3. *Coating.* The coating should be thinner than for tub grained plates. This can be accomplished by diluting the coating with water, use of a faster whirler speed, leaving more rinse water on the plate when the coating is poured on, or a combination of these. The Baumé of an albumin coating should be from 3.5 to 4.0. Roughly, this is 4 parts regular albumin coating (5.0 to 5.5 Bé) diluted with 1 part water. The Baumé of a casein coating should be from 2.5 to 3.0, which roughly calls for 1 part water in 3 parts of 4° Bé coating. If the coating chips off at any later stage of processing or use, it is too thick.

4. *Exposure.* Same as for tub grained plates.

5. *Lacquer.* It is always good to use a lacquer on any plate made by any procedure.

6. *Developing Ink.* Same as for tub-grained plates. The image has so little tooth or roughness that not much ink will stick to it. This, however, usually does not affect its performance on the press.

7. *Development.* Same as for tub-grained plates. Sometimes a weak ammonia solution (1/2 ounce per gallon) is needed for casein or soybean coatings.

8. *Post-Treatment.* An essential step the same as for any surface plate. LTF's Post-Nital solution is a good one to use on zinc. Use Post-Brunak,

on aluminum. Be sure you have developing ink on the image before post-treating. Otherwise the image may accept gum from the etch and become blind.

9. *Desensitizing Etch.* A strong etch should not be used. It can attack the plate metal too vigorously and undermine the image. Do not use an etch with a pH below 3.0. Adjust pH by adjusting the amount of acid used in making it.

10. *Gumming.* Same as for tub grained plates.

11. *Asphaltum.* Same as for tub grained plates.

Running brush grained plates on the press is similar to the handling of presensitized plates. The thinner coating on brush grained plates is not as resistant to abrasion as the coating on a tub grained plate. The press should, therefore, be adjusted for pressure of about .002 (instead of the usual .004) between the rollers and plate and plate and blanket. (Complete information on the press handling of grainless and fine grained plates was included in LTF's publication *Research Progress* No. 30.)

Deep-Etch Platemaking

The making of deep-etch plates is the same as for tub grained plates, except that the coating used is thinner. In starting out, use a 50:50 mixture of regular deep-etch coating and water. If it is difficult to remove the stencil, then you'll know that the coating is too thin and should be diluted less for the plates that follow. If the coating chips off, it's too thick.

(Complete information on making deep-etch plates on ungrained metal appears in LTF's Bulletin 804S, *How to Make Deep-Etch Plates on Ungrained Zinc and Aluminum.*)

Summary

Brush graining is an easy and practical way to grain plates. Although the method was developed primarily for Air Force requirements, it is useful for certain types of commercial work. Brush graining has been found to be very satisfactory for deep etch plates. It can also be used for surface plates with albumin, casein, soybean,

diazo, and KPR coatings if care is used in the application of developing ink.

Standard Methods

Except for this and the need for thinner plate coatings, standard platemaking methods can be used. The exact procedure and modification of the coating solution can vary in each plant. A number of experiments will probably be necessary in a given plant before satisfactory plates can be made.

LTF doesn't expect brush grained plates to revolutionize the industry or to replace the tub grained plates. However, they may be the answer for certain jobs that require high quality deep-etch plates or short run surface plates.★

This article is reprinted from a forthcoming issue of the Lithographic Technical Foundation's publication, "Research Progress."

Press Wash-Up Scraper

(From LTF Research Progress)

When you wash up a press, a bead of ink and solvent usually collects along the edge of the wash-up machine blade where it rides on the vibrator. And, from time-to-time during the wash up, most pressmen will run a finger across this riding edge of the blade to get the ink away from the roller.

There was once a sponsored man working at the LTF Research Department in the pressroom who apparently was allergic to tattle-tale gray on his hands. So, he bought a common household, wooden-handled, rubber plate scraper such as your wife uses in the kitchen. He cut off the corners at an angle that just fits the angle of the wash-up blade to the roller.

Running the rubber scraper across the roller does a much better job of cleaning the ink away and keeps your hands clean.

Tennis anyone?

Studies of Ink Transfer During Printing

By Charles H. Borchers

Supervisor, Paper & Ink Division
Lithographic Technical Foundation

IN RECENT years there has been an increasing need for fundamental information on the way that paper and ink affect each other during printing. When ink is transferred from the blanket to the paper, certain forces are involved in the splitting of the ink film. During the transfer, pulling occurs against the paper and within the ink film. It is surprising how little we know about the exact nature of these forces. Information on the factors that change the amount of energy needed to split an ink film and just how much energy is needed for different papers and inks can be very important.

Ordinarily we think about how ink affects paper especially when we have trouble with picking. But we have also wondered about what effect the paper had on the ink—if, during printing, the paper could change the ink so that there would be more chance of having trouble. These questions were among many others with no answers.

When we started the study at the Lithographic Technical Foundation, we first had to consider the forces that paper and ink are subjected to on an offset press. Figure 1 illustrates what happens. As the paper enters the nip and passes between the blanket and impression cylinder (*a* to *b*), there is a build-up pressure that compresses the ink, paper, and

blanket. As the paper passes point *b*, these compression forces are reduced and finally released at the point *c*. The paper, however, clings to the blanket between the points *c* and *d*. Tension forces are then developed in the ink, paper and blanket when the grippers (*e*) pull the paper from the blanket.

The force required to split an ink film depends mainly on the tack of the ink and the speed of the press. These are the main factors that determine how long the paper continues to follow the blanket from *c* to *d*—or what the exact distance *c d* becomes. This in turn, determines the speed at which the paper is stripped from the blanket at the point *d*. Other factors include the amount of pressure between *a* and *c* which affects the paper's absorption of ink vehicle and increases its tack. Another less important factor is the time that the paper is in the nip between *a* and *c*, which also affects vehicle absorption and ink tack. The effect of all of these factors varies with different ink and paper combinations.

There are still other factors that can affect the speed at which the paper is pulled off the blanket at the point *d*. For example, papers have different degrees of stretch. While the paper stretches as it is being pulled by the grippers, it stays on the blanket longer, the distance *c d* becomes greater, and the final velocity of separation is higher. The same effect is produced by a soft blanket which tends to conform to the surface of the paper and grip or hold tighter than a harder, more impervious blanket. Soft blankets hold the paper so that the distance *c d* and the final velocity of separation become greater.

A study of these forces represents a fundamental study of ink and paper relationships in the printing operation.

Forces On Paper

The forces that are imposed on the paper during printing are developed and released in a very short time. Also, forces of both tension and compression in varying degrees are involved. To study these forces and to be able to get data that will fully describe the actions that take place, special electronic equipment, strain gages, and some device that simulates the action of an offset press are required.

A strain gage consists of a length of fine resistance wire bent into various shapes or patterns and cemented to a paper base. The type we use at LTF are quite small. They measure only about $\frac{3}{8}'' \times \frac{5}{8}'' \times .010''$ thick. In use, the gage is cemented firmly to the material that is to be tested. When the material is strained by tension or compression, the gage is also strained to the same extent. This strain changes the electrical resistance of the strain gage wire.

When an electric current is sent through the wire, and the wire is strained, changes in the resistance change the current flow. These changes, when measured by a sensitive galvanometer, potentiometer, or a Wheatstone bridge, become an accurate measure of the strain.

The equipment that we set up for this study employs a modified LTF Pick Tester. This instrument simulates the action of the offset press. The tester has a small piece of offset blanket mounted on a platen or hammer. In usual pick testing, the blanket

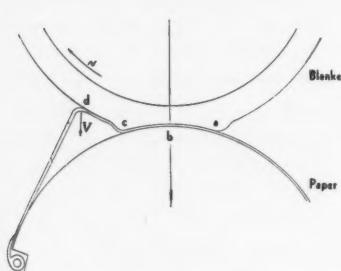


Fig. 1 Diagram of Impression

Preprinted, in part, from LTF Research Progress, No. 37.

Figure 4



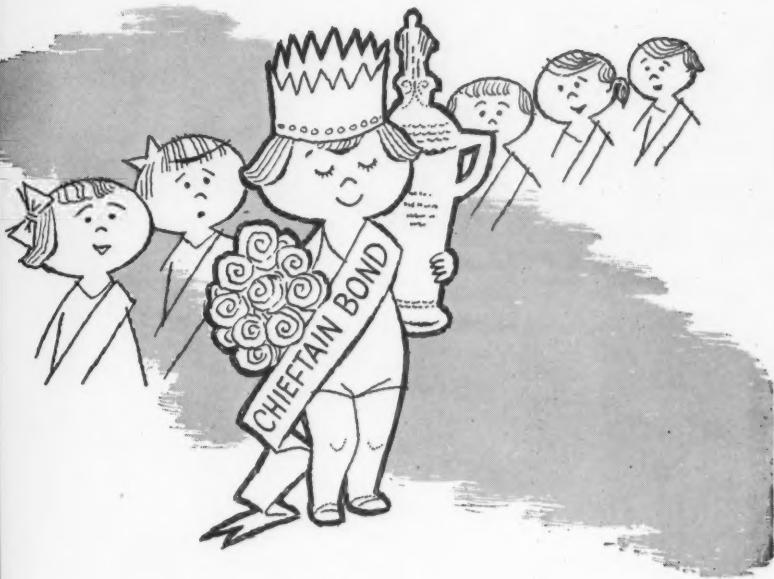
THIS AD

→
alerting
businessmen
to the fact that
Chieftain Bond
is the
largest selling
50% rag bond
in America

↓
appeared in
Nation's Business
Dun's Review and
Modern Industry
Advertising Requirements
The Reporter
Insurance Salesman
Rough Notes

Want to get more
Letterhead jobs?
Then ask your
Neenah paper
salesman for free
copies of "The
Right Letterhead
for You."

neenah
modestly
asks



why is
chieftain bond
the most popular
50% rag bond
in America?

Because people like everything about it.
Ask your printer for samples of
America's largest selling 50% rag bond —
Chieftain Bond.

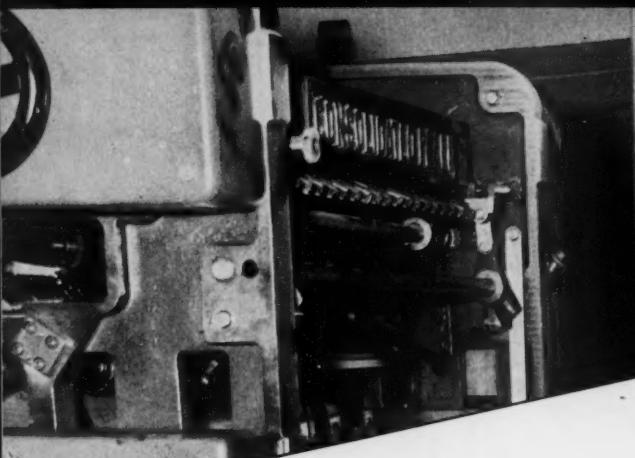


Want help in recognizing the right
letterhead for your company? Then
ask your printer for a free copy of
"The Right Letterhead for You."



neenah paper company
neenah, wisconsin

in Milwaukee . . .



Dilley
PRESS

PRINTING CO., INC.

LITHOGRAPHY - ENGRAVING

by Craftsmen

PHONE CONCORD 4-4760
1001 W. KEEFE AVENUE
MILWAUKEE 6, WISCONSIN

May 23, 1956

Consolidated International Equip.
and Supply Co.
1112 North Roman Avenue
Chicago 51, Illinois

Gentlemen:

After six months of operation with our Pearl
Offset Press, we know that some very extraordinary fields
have been opened for increased production. Speed and
quality were the purpose in trying your press and that is
exactly what we are accomplishing.

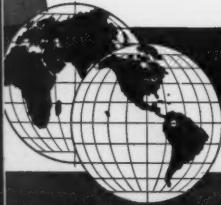
One day last week, we went to press on a 5,000
2-color job - maximum size sheet - results: 1st color on
at 8:00 A.M.; running time 1 hour, 20 minutes; 2nd color on
on and off in 1 hour, 30 minutes; The only press stops made were to check color
an hour. The only press stops made were to check color
and to load.

We have had the amazing experience of seeing
our new Pearl run for 4 hours without stopping and have
recorded 35,000 impressions in an 8 hour day. Truly, we
are an enthusiastic, satisfied customer and we congratulate
you on your fine product.

Sincerely yours,
DILLEY PRINTING CO., INC.

C.V. Dilley
C. V. Dilley, Pres.

**THIS LETTER
SPEAKS FOR
ITSELF!**



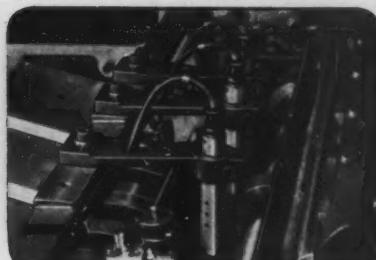
The world's finest equipment for Offset, Letterpress and Gravure.

THE CONSOLIDATED PEARL OFFSET PRESS

A superb example of Swiss Precision



FORM ROLLER ADJUSTMENT
Easily accessible from outside



PHOTRONIC SHEET CONTROL optically checks the sheet to register guides

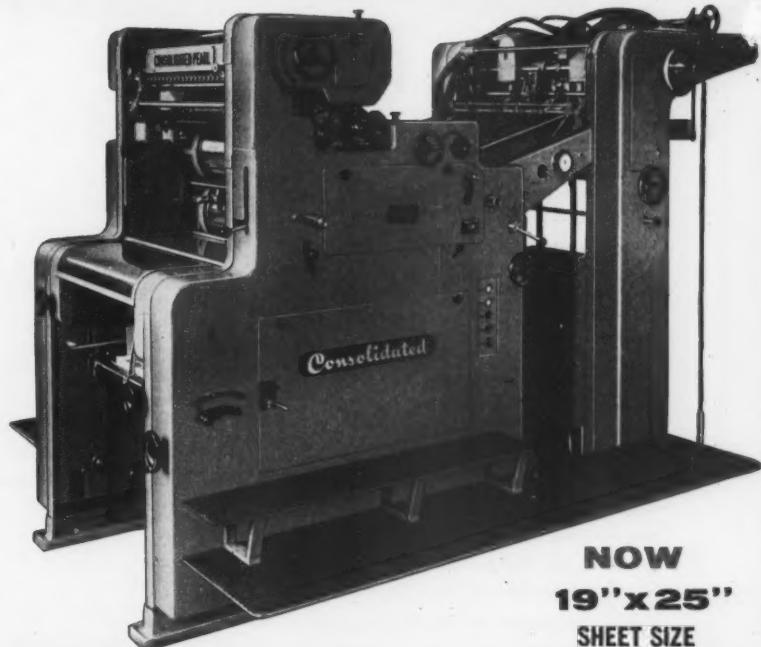


FULL COVERAGE INKING with four large form rollers of varying diameters

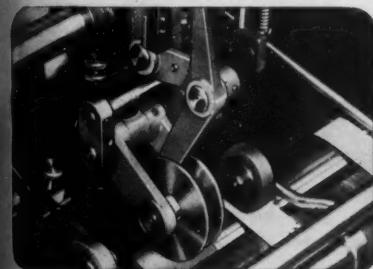
The Consolidated Swiss built Pearl Offset Press has been approved and accepted by the Graphic Arts Industry as the finest Press in its size class. With hundreds of installations all over the world, every Press is producing its maximum in quality, in speed, and in overall performance!

Little wonder it has gained full acceptance both from pressmen and plant owners who take pride and pleasure in producing a better job with greater returns.

You can purchase this outstanding, Swiss built press with payments as low as \$211.00 per month. Your entire payments can be charged off to depreciation and are tax deductible, as you pay them, through the Consolidated Depreciation Payment Plan.



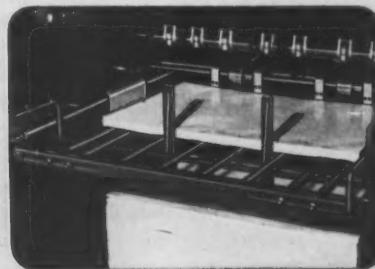
**NOW
19" x 25"
SHEET SIZE**



ELECTRIC PAPER FEED CONTROL
automatically trips press



MICROMETER CYLINDER ADJUSTMENT
Accurate, predetermined settings



NON-STOP DELIVERY permits unloading at full speed

CONSOLIDATED INTERNATIONAL

**EQUIPMENT AND
SUPPLY COMPANY**

(1112 N. HOMAN AVE. • CHICAGO 51, ILLINOIS • Phone BRUNSWICK 8-4000

330 WEST 26th STREET NEW YORK 1, NEW YORK
PHONE ALCONQUIN 5-4950

1430 VENICE BOULEVARD, LOS ANGELES 6, CALIFORNIA
PHONE RICHMOND 8-3896

1190 BENNINGTON STREET EAST BOSTON 28, MASSACHUSETTS
PHONE EAST BOSTON 7-2921

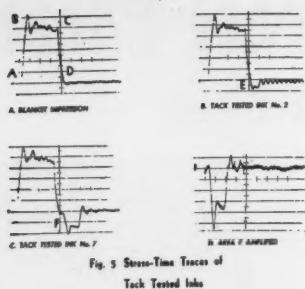


Fig. 5 Stress-Time Traces of Tack Tested Inks

is inked. It is then allowed to rotate and hit an anvil on which a sample of paper has been mounted.

For this study, we modified a pick tester so that the hammer strikes a special anvil equipped with strain gages. These gages are wired so that they become two arms of a Wheatstone bridge.

Fig. 4 shows the equipment installed in a temperature and humidity controlled area at the LTF laboratory. The modified pick tester with its special anvil and strain gages is shown on the far left. The amplifier is on the extreme right and the oscilloscope is in the center.

Typical Examples

Figs. 5 and 6 are typical examples of the trace that appears on the face of the oscilloscope when the pick tester blanket contacts the aluminum anvil under various conditions. The dot on the left of the traces was waiting to be triggered. This dot produces the trace when triggered by any force applied to the strain gage.

Fig. 5A shows the trace produced when the bare pick tester blanket contacts a bare anvil. The vertical distance *A* *B* represents the force exerted by the unbalanced flywheel acting through the compressed spring behind the pick tester we are using which gives a pressure of about 110 pounds per square inch on the anvil. The elevated horizontal distance *BC* is a measure in seconds of the blanket's contact time with the anvil at this pressure. In this case, the contact time was one thousandth of a second. When the energy stored in the spring is returned to the flywheel, causing it to rebound, the compression force on the anvil drops to zero. This is shown

by the curve between *C* and *D* where it returns to the base line and becomes horizontal at *D*.

Curve 5B is obtained when the blanket is inked with tack-tested ink No. 2. The vertical distance below the base line at *E* represents the tension force produced when the ink film resists splitting. In this case, the maximum tension force or pull against the anvil was about 16 pounds per sq. inch.

Curve 5C shows the trace obtained when tack tested ink No. 7 is used. This is a much tackier ink. Notice the increase in the tension force required to split it. The maximum force involved here was about 40 pounds per square inch.

Curve 5D shows how the oscilloscope can be adjusted so that the portion of the curve below the line (the negative portion) is the only one shown and is amplified for closer inspection.

Fig. 6 shows several more traces. Curve 6A shows the forces involved when a film of conventional offset ink is split. Curve 6B is that from the splitting of a quick-set type of ink of the same thickness. Notice how much alike these two curves are. In the next tests, a piece of coated paper was attached to the anvil and traces made with the same two inks. These are shown in Curves 6C and 6D.

These two traces demonstrate a number of interesting facts. First of all, the force required to split an ink film when it is printed on paper is almost twice as great as from smooth metal. Second, the force required to split the quickset ink film in contact with paper is almost 25 percent greater than that required by conventional ink. The actual difference was about 10 pounds per square inch more.

This would be expected. Quickset ink contains a solvent that the paper absorbs much more quickly than the linseed oil in ordinary ink. It is interesting that the great difference in force required to split the ink film develops in only about one thousandth of a second.

Conclusion

Our studies of ink transfer during

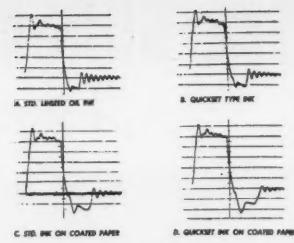


Fig. 6 Stress-Time Traces of Printing Inks and Printing Forces

printing at LTF are really just beginning. Many variables that lithographers have to face every day can be studied such as different types of blankets, inks, paper, paperboard, or metal being printed, and the effects of temperature, blanket pressure, contact time, and ink film thickness. With a systematic study, we hope to begin to understand, in a quantitative way, what happens on the offset press.

The research techniques described here can eventually help to solve a number of practical problems. For example, direct measurement of the ink absorptive characteristics of papers and paper coatings can tell us how a sheet will varnish or what type of ink will work best with a certain paper. Papermakers can use these methods to evaluate paper coatings and surface treatments to produce still better products.

In ink research, a study of the foretime curves can lead to new information about ink vehicles, ink tack, length, thixotropy, and other rheological properties which could lead to still better litho inks.

The main problems at this time are concerned with the transfer of ink from rubber to paper. The method itself, however, is quite versatile. It can, for instance, be used to study ink transfer (1) between different rollers of different composition, (2) from rollers to plates made with different materials, (3) from blankets made of different materials, and (4) from rubber blankets to surfaces such as metal foil, plastics, etc. The effect of changes in pressure and speed on the behavior of ink on the press can also be studied. All these factors are as important to metal decorating as they are to printing on paper.★

MR. HARRY W. ALEXANDER,
Founder of the
HARRY W. ALEXANDER ORGANIZATION,
business consultants, New York City.



"ADVANCE BOND makes our letters MUCH MORE IMPRESSIVE at less than the cost of postage per letter"

SURVEYS* SHOW that the *lowest* grade rag-content bond making up a letterhead and matching envelope costs less than three-cent postage.

This microscopically tiny cost is increased by *less than a penny* when you give your customers the advantages of the *highest* grade rag-content letter paper: ADVANCE BOND.

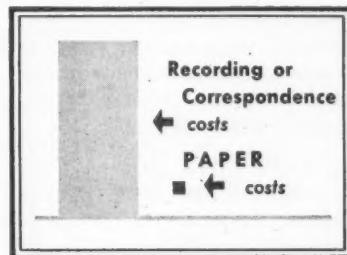
And you don't increase your customers' *total* correspondence costs appreciably. For paper is but 1% of such costs. If ADVANCE BOND should cost *twice* as much per letter as the *lowest* grade rag-content bond (and it doesn't), the paper cost of your customers' correspondence still would be negligible.

Thus, at *practically no increase* in your customers' costs, you enhance the impressiveness, effectiveness and prestige of their correspondence when you furnish ADVANCE BOND. You also insure permanence for

their letters and forms of a contractual character. ADVANCE BOND is one of the *time-proven* products of a mill which has specialized in permanent papers for 107 years.

ADVANCE BOND is distributed by leading wholesale paper merchants throughout the country. They will gladly furnish samples or write to the L. L. BROWN PAPER COMPANY, Adams, Mass.

* Conducted by the National Stationers and Office Equipment Association.



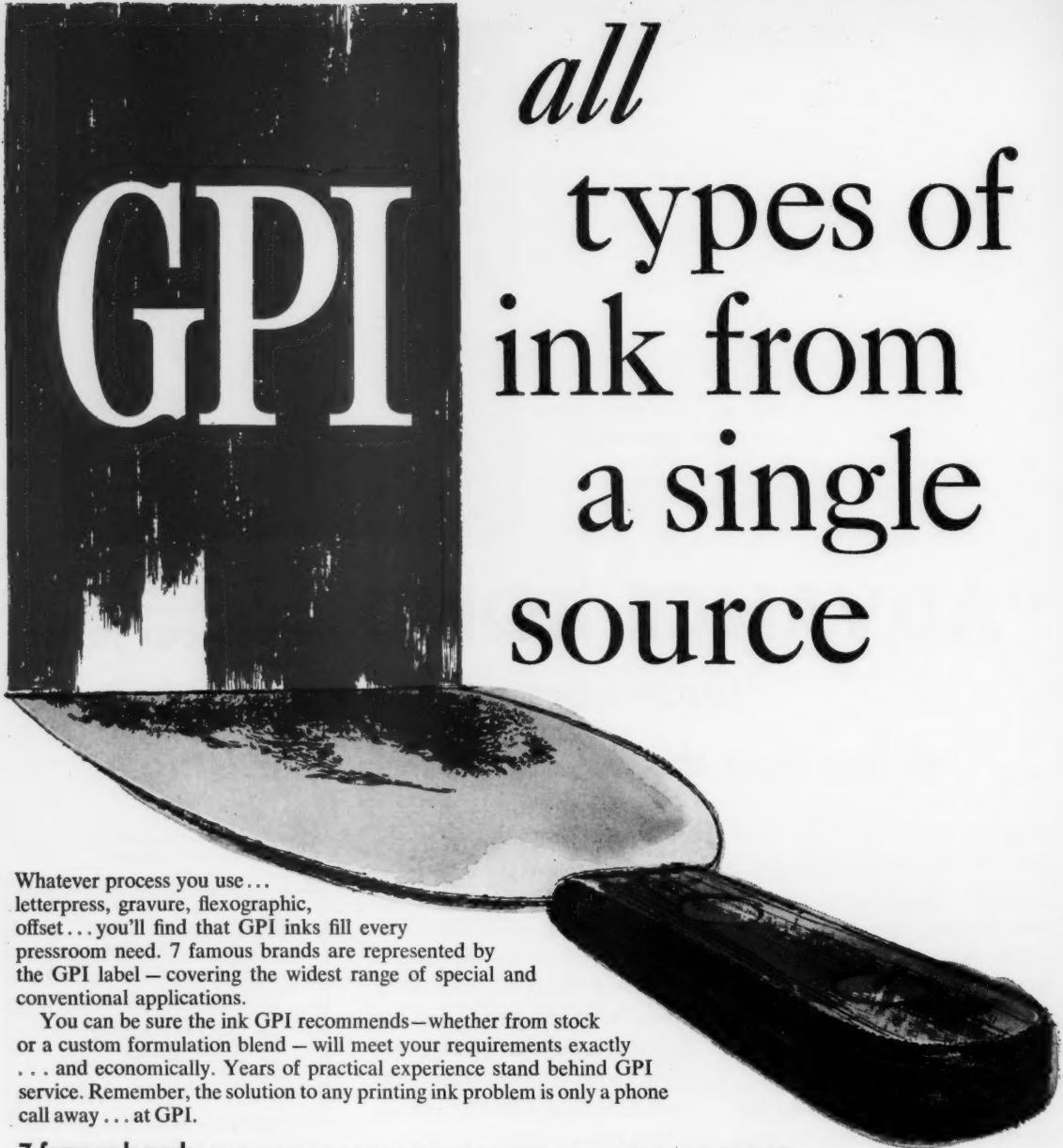
L. L. BROWN *Ledgers, Bonds, Index Bristol, Linens* PAPERS

"SO MUCH
extra value



FOR SO LITTLE
extra cost."

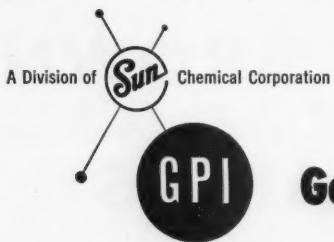




Whatever process you use... letterpress, gravure, flexographic, offset... you'll find that GPI inks fill every pressroom need. 7 famous brands are represented by the GPI label — covering the widest range of special and conventional applications.

You can be sure the ink GPI recommends — whether from stock or a custom formulation blend — will meet your requirements exactly... and economically. Years of practical experience stand behind GPI service. Remember, the solution to any printing ink problem is only a phone call away... at GPI.

7 famous brands: AMERICAN INKS • EAGLE INKS • FUCHS & LANG INKS • KELLY INKS
MORRILL INKS • SIGMUND ULLMAN INKS • CHEMICAL COLOR & SUPPLY INKS



BRANCHES: Chicago • Cincinnati • Cleveland • E. Rutherford, N. J.
Fr. Worth • Kalamazoo • Kansas City • L. I. City • Los Angeles • Milwaukee
N. Bergen, N. J. • Norwood, Mass. • Philadelphia • Portland, Ore. • San
Francisco • Seattle • St. Louis • St. Paul • Canada: London • Montreal
Toronto • Tacuba, Mexico.

General Printing Ink Company

10th Street & 44th Avenue, Long Island City 1, N. Y.

DIVISIONS OF SUN CHEMICAL CORPORATION

HORN (paints, maintenance and construction materials, industrial coatings) • WARWICK (textile and industrial chemicals) • WARWICK WAX (refiners of specialty waxes) • RUTHERFORD (lithographic equipment) • SUN SUPPLY (lithographic supplies) • GENERAL PRINTING INK (Sigmund Ullman • Fuchs & Lang • Eagle • American • Kelly • Chemical Color & Supply Inks) • MORRILL (news inks) • ELECTRO-TECHNICAL PRODUCTS (coatings and plastics) • PIGMENTS DIVISION (pigments for paints, plastics, printing inks of all kinds) • OVERSEAS DIVISION (export) • A. C. HORN COMPANY, LIMITED (Canada) • GENERAL PRINTING INK CORPORATION OF CANADA, LIMITED • FUCHS & LANG de MEXICO, S. A. de C. V.

PHOTOGRAPHIC *Clinic*

By *Herbert P. Paschel*

Graphic Arts Consultant

Q.: What type of colored original (transparency, carbro print, dye-transfer print, artwork, etc.), is best suited for reproducing food illustrations?

M.H., CHICAGO

A.: Your question involves both esthetic and technical considerations but the reply will be concerned only with the latter. In any color process, facsimile reproduction is possible when the tone scale (brightness range) and color gamut of the reproduction match the original. In lithographic, as well as in other printing processes, these two factors are established by the paper and inks used. Obviously, to obtain the best possible result with the least effort, the original should never exceed the limits of the reproducing process. Reflection copy, i.e., carbro and dye-transfer prints, and artwork, will have a brightness range close to that obtainable in the reproduction. The color gamut of color prints is likewise reproducible if good paper and the proper inks are used. Unless artwork is created with a palette of colors known to be reproducible, it is conceivable that the color gamut of artwork could be beyond the limits of 4-color printing. The maximum brightness range of color transparencies suited specially for use as color copy can be made with the desired brightness range.

Any one of the copy forms you mention is suitable, providing it has the characteristics demanded by the reproducing system namely — a

Camera troubles? Why not drop a note to Mr. Paschel, c/o Modern Lithography, Box 31, Caldwell, N. J. He'll be glad to draw on his years of experience as a consultant to answer your question.

brightness range and color gamut that can be duplicated by the paper and ink combination.

Q.: Because of an eye injury I have to wear dark glasses at all times. Will this affect my color vision and be the cause of errors in evaluating color copy, separation negatives, etc.?

A.: That depends entirely upon the absorption and transmission characteristics of the glasses you wear. Neutral tint glasses generally have a fairly constant transmittance in the visible spectrum range. However, some glasses that appear to be neutral may have areas of high absorption relative to other spectral regions. This, of course, would affect color discrimination. Colored glasses would definitely influence color vision; the degree depends upon the density of the color, absorption factors, etc.

The characteristics of eye-protective glasses were investigated by the Bureau of Standards and summarized in circular #471. Spectral transmittance curves for a great number of glasses are included. It might be a wise precaution to discuss the matter

with your doctor and follow his advice since there may be good reason for wearing a specific type of glass in your case. Also, to rule out the possibility that you may have an inherent color deficiency, you should take a color discrimination test.

Q.: What is "Correctone" film and how is it used in lithography?

C.V.A., BINGHAMTON, N. Y.

A: "Correctone" film is a continuous-tone material containing two emulsions of different sensitivity and contrast. The upper emulsion appears to be of the "color-blind" variety, i.e., it is sensitive to blue light only. The second emulsion layer is orthochromatic in spectral sensitivity. The two emulsions differ also in exposure speed and contrast, the color-blind layer being of soft gradation whereas the ortho layer is extremely contrasty. The upper layer is several times faster in exposure response than the lower layer.

The primary function of this new material is to improve highlight contrast of tone subjects. This is accomplished by first exposing the film to the image, using white light, during which all of the tone values of the subject are recorded, mainly on the upper emulsion layer.

A second exposure is given through a yellow filter which results in an exposure only in the lower (ortho) layer. Because of the extreme contrast and lower speed of the ortho layer, the second exposure records

(Continued on Page 171)



WHERE YOU CAN BUY

Warren's FotoPlates



ALBUQUERQUE, NEW MEXICO

Jones Graphic Products Co.

ATLANTA, GEORGIA

M & F Supply Company, Inc.

BALTIMORE, MARYLAND

Bowden Graphic Arts Supply Co.
George R. Keller, Inc.

BOSTON, MASSACHUSETTS

Bridgeport Engravers Supply Co., Inc.
Pitman Sales Co. of New England, Inc.

BUFFALO, NEW YORK

Buffalo Graphic Arts Supply, Inc.

CHARLOTTE, NORTH CAROLINA

George R. Keller, Inc.

CHICAGO, ILLINOIS

Bridgeport Engravers Supply Co., Inc.
Chicago Litho Products Company
Harold M. Pitman Company
K. Schlanger Company

CINCINNATI, OHIO

McKinley Litho Supply Company, Inc.

CLEVELAND, OHIO

Bridgeport Engravers Supply Co., Inc.
Harold M. Pitman Company

DALLAS, TEXAS

Harold M. Pitman Company
Lew Wenzel & Co. of North Texas

DAYTON, OHIO

Salem Camera Company

DETROIT, MICHIGAN

Garrick Photo Supply Company
Lithomaster Company

HOUSTON, TEXAS

Lew Wenzel & Co. of South Texas

KANSAS CITY, MISSOURI

Wenzel Equipment Company

LOS ANGELES, CALIFORNIA

The California Ink Company, Inc.

MADISON, WISCONSIN

Widen Offset Supply Company

MILWAUKEE, WISCONSIN

Reimers Photo Materials Company

MINNEAPOLIS, MINNESOTA

Litho Supply Depot, Inc.
T. K. Gray, Inc.

NASHVILLE, TENNESSEE

Southeastern Printing Ink, Inc.

NEW YORK, NEW YORK

Bridgeport Engravers Supply Co., Inc.
Harold M. Pitman Company

NORTH BERGEN, NEW JERSEY

Harold M. Pitman Company

PHILADELPHIA, PENNSYLVANIA

Penn Dell and Company
C. B. Collins Supply Company

PORTLAND, OREGON

The California Ink Company, Inc.

ST. LOUIS, MISSOURI

McKinley Litho Supply Company, Inc.
Rissmann Graphic Arts Supply Co.

SAN FRANCISCO, CALIFORNIA

The California Ink Company, Inc.

SEATTLE, WASHINGTON

The California Ink Company, Inc.

TOLEDO, OHIO

Toledo Lithograining and Plate Co.

TULSA, OKLAHOMA

Lew Wenzel & Co. of Oklahoma

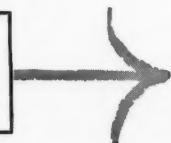
UTICA, NEW YORK

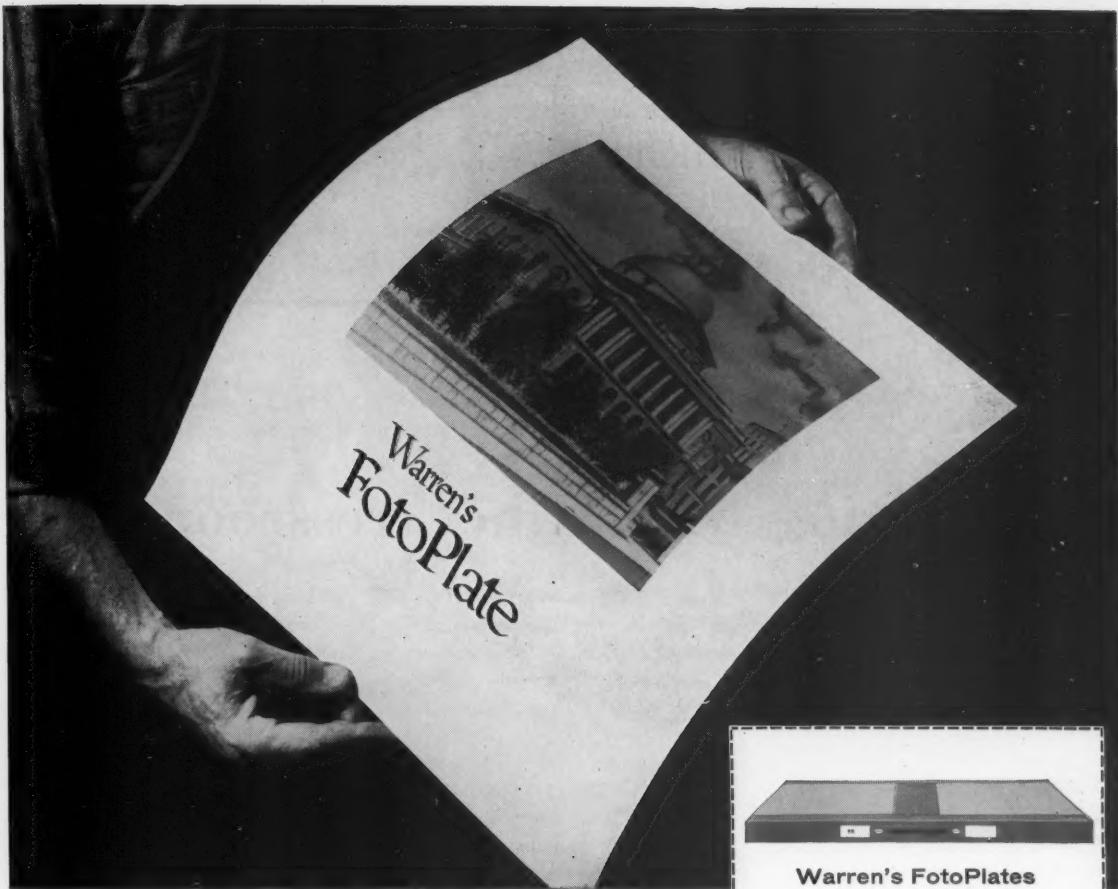
Buffalo Graphic Arts Supply, Inc.

WASHINGTON, D. C.

George R. Keller, Inc.

See a demonstration at BOOTHES 33 and 34,
NAPL Convention, Hotel Commodore, Sept. 19-22.





Warren's FotoPlate

(PRESENSITIZED LITHOGRAPHIC PLATE)

GIVES YOU A TRIPLE ADVANTAGE

1. *It delivers the finest reproductions of halftones.*
2. *Does this with economy.*
3. *And does this with speed and ease.*

Warren's FotoPlate possesses excellent dimensional stability. Lithographers like *FotoPlate* because no special technique is required. With *FotoPlate*, more good plates can be made and on press in a working day.

Investigate the advantages of *FotoPlate* for yourself. Get further details and special instruction booklet from any *FotoPlate* distributor, or communicate with the manufacturer's headquarters: *S. D. Warren Company, 89 Broad Street, Boston 1, Massachusetts.*



**Warren's FotoPlates
are available
in the following sizes**

Twenty-five plates to a package.
Four packages (100 plates) to a carton.

10 x 16	27 $\frac{1}{4}$ x 28 $\frac{1}{2}$
17 $\frac{1}{2}$ x 16	27 $\frac{1}{4}$ x 30
15 $\frac{1}{2}$ x 20 $\frac{1}{2}$	26 $\frac{3}{4}$ x 31
20 x 22 $\frac{1}{4}$	25 $\frac{1}{2}$ x 36
19 $\frac{1}{4}$ x 23	26 $\frac{3}{4}$ x 36
19 $\frac{1}{4}$ x 24 $\frac{1}{2}$	19 $\frac{1}{2}$ x 36
22 $\frac{1}{2}$ x 30	30 $\frac{1}{4}$ x 35
24 $\frac{1}{4}$ x 30	32 x 41
	32 $\frac{1}{2}$ x 43



LITHO PRODUCTION

Clinic

By Theodore F. Makarius

Mixing Ink in the Pressroom

MIXING ink in the pressroom is one of the most difficult operations to perform successfully, until the pressman acquires a knowledge of blending colors and weighing ingredients. The actual mixing of the ingredients is the first thing that should be practiced, for it is the most essential. It involves not only changing color shade but manipulation of ink.

First of all, the amount of mixing required to disperse an ingredient in a batch of ink must be known, and the best way to determine this is as follows:

To one pound of a dark color, such as red or blue, add one ounce of either yellow or white. Put it on a slab or mixing table and by timing the operation ascertain the amount of mixing and stirring required to mix the two thoroughly into one shade. From then on the same amount of mixing should be done when adding driers or varnish or any ingredient. It is best to make the test with a heavy bodied ink, for the softer the ink mixture, the less time will be needed!

Intricate Color Matches

Very intricate color matches are best ordered directly from the ink manufacturer, but with some practice and a fair understanding of the technique involved, a pressman may become efficient in blending standard colors to the proper shade. One ad-

vantage in this practice is that all the colors used are standards and the working quality of each is known.

When mixing ink in the pressroom it is best not to use more than three colors to each mixture, for the more colors used the harder it is to duplicate the formula. It is best not to use black in mixing color formulas as it tends to dirty the color and in some formulas causes the color to change considerably when dry.

Use a Clean Knife

When taking ink from the can you should use a clean knife and if the entire contents of the can is not being used at the time it should be taken out in even layers. This is done with a knife that is a little more than half the width of the can. Insert it only deep enough into the ink so that one complete turn of the knife will remove the quantity desired.

This leaves the ink left in the can even, with no indentations or holes. Either varnish or water may be poured on top to seal it and prevent it from skinning. The next time it is to be used, the water or varnish may be poured off and the ink may again be taken out as before. Digging a knife into the ink and leaving indentures and holes creates excessive waste of ink due to skinning and presents the hazard of hiccies forming in the ink.

Keeping track of the weights when

making formulas is a fairly simple matter if done properly. Simply remove the cover and paper. If the ink can is partially filled, remove any skin or covering and weigh the total can and good ink. After the formula is complete weigh the balance in each can.

Mottled Print

Question: The color used on the attached sheet was one part blue and one part Titanium white. We would like to know why this blue did not print smoothly. In mixing the ink, I felt it was a little too heavy and I reduced it with #1 varnish, #00000 varnish and #5 varnish. It seemed no matter what I did to the ink the job was as grainy as this sample shows.

Answer: In my opinion, the mottled effect shown on the sheet you submitted was caused by running an excess amount of ink on the press. If you had used one part of white to three or four parts of blue, and maintained the same color strength you did on the specimen you sent, it would have printed smoothly.

With reference to your adding varnish — #1, #00000 and #5 — #1 and #5 would not cut the body of the ink unless you added an excessive amount, and that would defeat the original purpose. The #5 varnish would tend to body the ink and not reduce it.★

*Try
this
new,
better
way*

**to reduce colors...
make tints...
control "hickies"**

**BBD
PRINTLITH
#545**



Here's the new-fashioned way to make tints and reduce color strength of *all* offset litho inks. Just use BBD "PRINTLITH #545" instead of old-style transparent whites and other compounds that often cause scumming or greasing.

"PRINTLITH #545" is also a real aid in improving ink performance and minimizing "hickey" trouble. A unique tack-free transparent extender with all the characteristics of a fine litho ink, "PRINTLITH #545" reduces the pull between stock and blanket . . . helps ink transfer more easily . . . eliminates a major cause of white spots in solid areas. Does not change the ink's normal drying rate.

"PRINTLITH #545" contributes to cleaner, sharper, snappier printing on any offset stock . . . is particularly good for heavy forms and large solids on coated paper.

"PRINTLITH #545" may be mixed with ink on the slab or in the fountain. Order a trial 5-lb. can today and see for yourself how it can help you do a better job.





Toss Out Hand Operations?

Why not? For hand or manual operations are your most expensive production costs! The more you have, the *higher* are your costs.

Let Wagner Engineers check over your production units to see if some back-breaking operations may be eliminated. They'll tell where the machines can do the work. Do the work and add to quality and production volume.

Perhaps we can streamline your production units. Why not try us and see? There's no obligation.

WAGNER LITHO MACHINERY

Metal Decorating Machinery

Harborside Terminal, Unit 3, 34 Exchange Place, Jersey City, N. J.





Artists preparing layouts for final approval before plates are made at Crown Cork & Seal plant.

The Metal Decorating Process: No. 7

ART WORK and MAKEREADY

By *C. K. Straub*

Supervisor, Art & Platemaking Dept.
Crown Cork & Seal, Inc. Can Div.

ARTWORK is one of the most important parts of the metal decorating process. Previous authors in this series on metal decorating have emphasized the part played by feeders, presses, coaters, ovens, sheet metal stackers and electric drives. Now it is time to discuss the work of the art department in a metal decorating plant.

It is not easy to place the art de-

partment in a fixed position in the series of processes that comprise metal decorating. In many ways, it may be thought to be the first step in metal decorating, because it is here that preliminary designs are prepared. However, so much cooperation is needed between the art department and all the other phases of metal decorating that it really comes into consideration all along the line and

the various departments must be coordinated to make full and effective use of the art department.

New Crown Can Plant

At Crown Cork & Seal's new can division plant at Ashton Road, in Philadelphia (see *ML* article, Oct., 1955, page 84) a modern art department is housed in an air-conditioned and humidity controlled building,



Utilizing the latest advances in synthetic chemistry, S&V laboratories have produced an outstanding, new offset ink — DYNASET! The product of specialized experience in the development of consistently dependable inks, it assures peak press performance every time!

Years ahead in concept — DYNASET prints cleanly with maximum surface retention.

It is unusually effective for highlight and halftone reproduction . . .

will not set up on the rollers or change consistency during the run.

Fast-drying DYNASET is available in a full range of colors as well as a variety of blacks. For a high-strength, press ready ink, check the advantages of DYNASET today. Your best bet . . . is DYNASET!

Sinclair and Valentine Co.

Main Office & Factory, 611 West 129th St., N. Y. 27, N. Y.

Over 35 Branches Provide Service From Coast To Coast

and contains the following basic equipment:

- Art and layout tables.
- Glass top tables with softly diffused background light for color separation and opaquing.
- Cameras equipped for step and repeat actual size or enlargement and reduction.
- A fully-equipped central dark room for camera development with localized temperature control.
- Glass, film and print driers.
- Dark room and "daylight" vacuum frames.
- Plate press composing machines and related equipment.
- Plate coating whirlers and developing sinks with down draft ducts.
- Hand proving press, drying oven and other auxiliary equipment.

The art department supplies the bridge between the sales — representing the customer — and the lithographic operations — representing the metal decorating plant. It must be able to perform a number of functions for the customer. In addition it must be able to cooperate with advertising agencies and industrial designers in carrying out the design that is to be decorated on metal. It is of vital importance in all metal decorating plants that the sales and art departments be in close communication so that the art department can interpret the exact wishes of the customer in designing the container.

Savings Possible

A great deal of time and money can be lost if the salesman is not explicit in relaying the desires and exact specifications that the customer has in mind for his job. Very often an art department can make suggestions by way of the salesman to help the customer cut down on needless expense in a design that he has planned.

This cooperation is needed also between the art and engineering departments to insure that dimensional requirements, design placement and other considerations are accurate.

The practicality of the design is



Laboratory facilities, where special color coats and varnishes are applied for use on hand proving press.

discussed by the art and lithographic production departments. It is necessary that the art department know the materials to be used and that they be able to make full use of multicolor reproduction if it is possible.

The process of the art department in preparing material preparatory to press work differs very little from the approach to finished stock in allied fields of the graphic arts. In this field, of course, the art department must take into account that the design is to be placed on metal and that certain problems exist in metal decorating that are not confronted by the paper lithographer.

Let's take a typical example of design work in the metal decorating plant:

First Contact

The usual first contact with a new design occurs either through the customer to his representative designer or the advertising agency, or through sales directly to the customer. It is at this point that the artist starts with his sketch, or several rough sketches, utilizing the ideas of the customer as they are related to him. Discussions normally follow on color harmony, two-color operation, simplicity and effectiveness of the design. Consideration always is given at this stage to possibility of cutting costs for the customer.

A comprehensive sketch follows the

roughs. This is submitted to the customer by the sales department.

Of prominent importance at this point is determination of special handling practices, such as heat processing, pasteurizing, etc., that may dictate the materials to be used, so that sketch development can be carried out within whatever limits are required. Maximum consideration must be given to simulating on the sketch, as closely as possible, a shade of color practical to metal decorating. In other words, the finished sketch presented to the customer, wrapped around the size can to be produced, must duplicate, as closely as possible, the finished product in color, dimension, placement, etc. Usually the salesman supports his sample with metal decorated color swatches to illustrate his suggestions on color.

After the sketch is approved, the black and white drawing is made up on a metal-backed layout to engineering standards to insure dimensional stability and drawing condition during long periods of storage. Critical quality standards are established on every phase of the drawing as to sharpness, typography, etc.

The usual steps through the camera and photo-composing machines follow. In the camera, extensive use is made of the step and repeat mechanism for reduction of exposure on the press plate. By using the step and repeat unit, a number of identical

designs can be exposed on the plate at a greatly reduced cost.

Historically, basic can designs remain unchanged for a considerable length of time. Therefore, it is frequent that plates have to be remade because of the excessively long runs with the same design.

This brings us to the type plates that are best suited for metal decorating. With all the recent developments in lithographic plates, metal decorating plants have to be constantly testing new materials to see which will give best results.

A hand-proving press is very necessary in a metal decorating plant to carry out the work of the art department. The press is in constant use for the art department, to provide a metal blank that can be closely simulated in production.

Here the inks, coatings and varnishes that will be used in production are tested. Such other qualities as film weight, bake, etc., also are tested in laboratory type coaters and ovens that simulate closely the actual production conditions.

'Practical Zone'

Maximum consideration through the entire process must be given to tailoring the product to fit within the "practical zone" of the lithographic department. This is accomplished only when maximum flow of information exists in both directions from the customer to the representative of the metal decorator. It must extend to the art department, the engineering and the lithographic divisions.

This active interchange of information has kept can lithography abreast of other phases of the graphic arts. The idea in almost all can lithography is to produce a container with maximum shelf appeal and consumer acceptance. Throughout the process, the art department's work is so important to the end result that it is a vital part of any metal decorating plant. Rigid standards are necessary as the art work moves from artist's conception to finished metal sheet. Specifications are to the thousandth of an inch to assure that the customer's design is placed on the plate in the most practical manner and as closely as is possible to his idea.★

Author to Speak at NMDA Mtg.

William Hazlett Upson, author of the "Alexander Botts" series appearing in the *Saturday Evening Post* and other magazines, will be guest dinner speaker Oct. 17 at the National Association of Metal Decorators' 22nd meeting, scheduled to be held in Atlantic City, Oct. 15-18. Mr. Upson's topic will be, "You don't have to be crazy, or what it takes to be a salesman."

"Bright Steel," a motion picture in color and sound, made available for the convention by Bethlehem Steel Co., will be shown Oct. 15. A trip has been scheduled Oct. 16 to Crescent Ink & Color Co., and Triangle Publications, both in Philadelphia.

Paint Co. Lithographs Paint Cans

The Sherwin-Williams Co. held an open house recently to inaugurate its new San Leandro, Cal., can making and lithographing plant. Albert J. Zanutto is superintendent of the lithography department, which operates a press and a coating line and is printing oil and paint cans for the trade.

Canco Installs Harris Tandem

American Can Co. has installed a 36 x 36" two-color high-speed tandem Harris-Seybold metal decorating press in its Los Angeles plant. According to the firm, this is the first installation on the West Coast of this type of press, which was developed by Harris-Seybold in conjunction with American Can Co.

Miehle's Sales, Earnings Rise

Miehle Printing Press and Manufacturing Co. reported Aug. 23 increases in both sales and earnings for the third quarter and the nine months' periods of the current fiscal year. Combined sales of Miehle and Dexter Folder Co. in the period ended July 31 for Miehle and June 30 for Dexter, increased from \$8,949,025 in 1955 to \$9,822,362 in 1956. J. E. Eddy, President, reported to shareholders. Dexter became a Miehle wholly owned subsidiary on February 28, 1956.

Direct Mail Awards Announced

Fifteen direct mail advertising firms, including a Belgian agency, were named winners Aug. 26 in the 35th annual awards competition of the Mail Advertising Service Association International meeting at Chicago's Drake Hotel.

The John Howie Wright Cup, symbolizing the best creative advertising program for a direct mail concern, was awarded to Hub Mail Advertising Service, Inc., Boston. Hub Mail also took top honors in the Member's Own Promotion competition.

Second and third place winners in this same division were Bachman Letter Service, Minneapolis, and Commercial Letter, Inc., St. Louis. Another Boston firm, American Mail Advertising, Inc., was awarded honors for the best creative direct mail campaign conducted for a client. American Mail has won more top awards than any other firm in the field of direct mail during the last two years. Runner-up to American Mail was Bodden & Dechy, Brussels, Belgium, which was awarded a cup.

Excellent advertising entries gave the Michael Press Corp., New York, three awards in the Mechanical Production division. It won first place for Offset (over 10 x 14 presses), was runner-up for Offset (10 x 14 presses), and also finished second for Varityping and IBM Composition.

IPI Appoints Three

The IPI division of Interchemical Corp. has named Raymond F. Lecture to the post of varnish laboratory supervisor, and Fred Rosenbloom to maintenance supervisor, at the firm's Cincinnati factory. Robert S. Czeropski has been appointed supervisor of the product development laboratory at the Elston Ave. plant in Chicago.

Pittsburgh Lithographer Dies

Harry D. Schmid, 91, formerly with Bankers Lithographing Co., Pittsburgh, died Aug. 16 at his home in that city. Mr. Schmid retired earlier this year from Bankers, where he had worked since 1941. Before that he had been with the Fort Pitt Lithographing Co., a firm he established in 1909.



Sign of an expert!



Your assurance of superior quality at a savings!

Certified Professional Platemaker . . . he's the expert in your city who can assure you of superior quality lithography and *save you time and money as well.*

The platemaker displaying this symbol has earned it. It signifies outstanding craftsmanship based on years of experience. This invaluable experience shows in every job he does . . . keeping costs down, improving quality.

To give you more for your production dollar, your Certified Professional Platemaker recommends 3M Brand Photo Offset Plates.

Perfectly-smooth, 100%-consistent 3M Plates provide the perfect surface for reproducing original copy faithfully. These chemically-treated, aluminum plates eliminate the 43 costly variables found in conventional surface-coated plates. Your work is 43 steps closer to perfect reproduction.

For the quality work you want at the lowest possible cost, put this dependable team to work for you—the Certified Professional Platemaker in your area and 3M Brand Photo Offset Plates!

3M Photo Offset Plates

BRAND

3M COMPANY

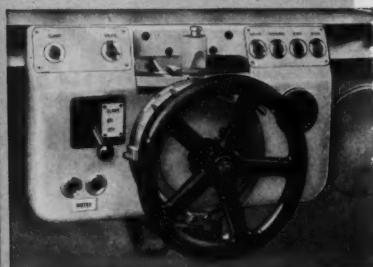
"3M" is a registered trademark of Minnesota Mining and Manufacturing Co., St. Paul 6, Minn.
General Export: 99 Park Ave., New York 16, N.Y. In Canada: P. O. Box 757, London, Ont.

PRODUCT OF
3M RESEARCH

CONSOLIDATED

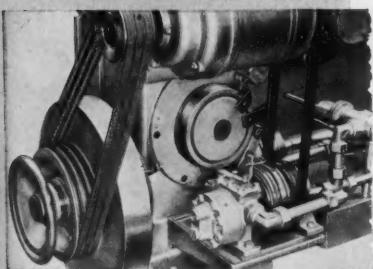
RPM

PAPER CUTTERS



65"

**FULLY AUTOMATIC CONTROLS
FOR EVERY OPERATION**

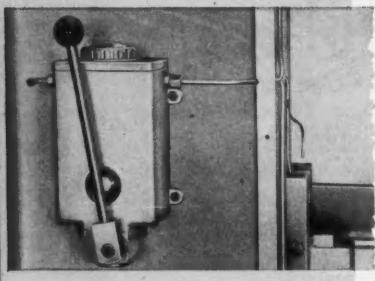


**INSTANTANEOUS ELECTRONIC CLUTCH
GUARANTEES SAFETY**

THE 65" CONSOLIDATED-R.P.M. CUTTER

The Consolidated 65" RPM Cutter, fully automatic, with many outstanding features found in no other cutter. Auto spacing, automatic trimming, squaring-up and handling. With air cushion table for smooth gliding actions and high pile of heavy stocks.

The Consolidated RPM, recognized the world over as the finest, safest and most efficient cutter.

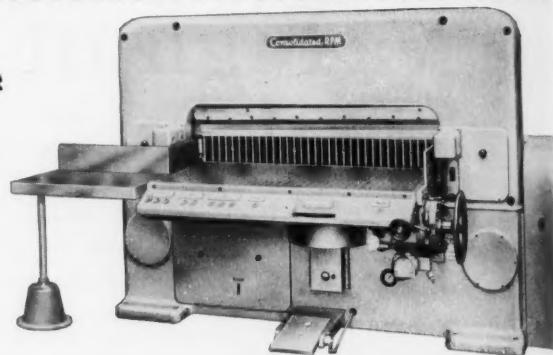


**CENTRALIZED LUBRICATING CUTS
NON-CHARGEABLE TIME**

41 & 51"

CONSOLIDATED-R.P.M. CUTTER

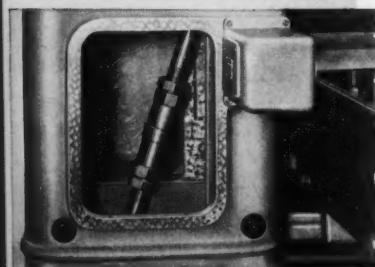
Fast, efficient, safe. Economical, productive, easy to operate. The Consolidated 41" and 51" is a complete, efficient cutter with all of the necessary accessories and features to do the most productive job. You get all these "Extras", and without paying anything extra for it.



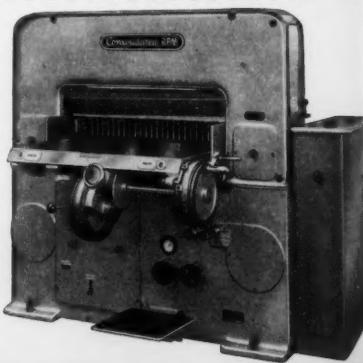
32"

CONSOLIDATED-R.P.M. CUTTER

A small cutter, designed and built with the efficiency, the strength and feature of the larger cutters at a competitive price. The small cutter with every automatic feature. The fast, easy, all purpose cutter for the smaller plants, and that extra cutter for the larger plant at peak loads. The Little fellow that can do a Big job.



**HEAVY DUTY PULL-BARS ARE
CONVENIENTLY ACCESSIBLE**



Ad-a Unit Side Tables available for every plant layout.
Tailor-made to meet your requirements.

CONSOLIDATED INTERNATIONAL

**EQUIPMENT AND
SUPPLY COMPANY**

1112 N. HOMAN AVE. • CHICAGO 51, ILLINOIS • Phone BRUnswick 8-4000
330 WEST 26th STREET, NEW YORK 1, NEW YORK—Phone Algonquin 5-4950 1430 VENICE BOULEVARD, LOS ANGELES 6, CALIFORNIA—Phone Richmond 8-3896
1190 BENNINGTON STREET, EAST BOSTON 28, MASSACHUSETTS—Phone East Boston 7-2921

Litho Club

NEWS



Twin City

Educational Films Presented

C. R. Weber, technical representative for Sun Supply Co., division of Sun Chemical Corp., in cooperation with Kenneth Mairson, Twin City representative, presented two educational films at the August meeting of the Twin City Litho Club.

"Surface Plates, the Metalife Process," a 16-minute color movie, showed the use of Metalife surface coating under actual shop conditions. The second film, "Pressroom Suggestions," was developed by Mr. Weber and H. W. Gegenheimer. It demonstrated in color the 12 steps necessary to a good wash-up, the causes of a poor wash-up and what to do to correct them. It also showed the ink agitator and water levels in action. The film was taken at the Hollingshead Can Co. plant in New Jersey, showing a two-color Hoe metal decorating press in operation.

Both films were narrated by Mr. Weber and he conducted a question and answer period after the showings. Mr. Weber formerly was in the metal decorating field with Crown

Cork & Seal Co. from 1933 to 1945 in full charge of plate, camera and graining operations.

Houston

A. B. Dick Press Demonstrated

Boyd Alexander and Benjamin Bradley, sales representatives, Wilson Stationery and Printing Co., and Scott Crawford, manager of the press sales division of Wilson, demonstrated the new A. B. Dick press at the August meeting of the Houston Litho Club. Although the press was designed and built primarily for office duplication, it is also finding increasing use by printing and lithographing plants as a small auxiliary press.

The press was put through full operation and it was pointed out that no change in packing is necessary to compensate for differences in weight of paper stock or differences in thickness of plates. A direct image plate, brought by one of the club members, was run on the press with results being unusually good, demonstrating the versatility of the press.

The board of directors held their

monthly meeting Aug. 13 and voted to purchase 100 NALC lapel buttons. It was announced that Earl Hinkel, American Type Founders, Elizabeth, N. J., will demonstrate an ATF-Mann, two-color offset press at the September meeting of the club, scheduled to be held in the pressroom of the Houston Litho Co.

Chloe Lee Mallett, one of the club's most active members for the past five years, has resigned the position of corresponding secretary to devote more time to her business, Chloe Lee Mallett Lithocopy.

Shreveport

New Club Elects Officers

J. Robert Walton, of Walton Press, Shreveport, La., has been elected president of the newly formed Shreveport Litho Club. Other club officers are William Sidders, Journal Job Printing, vice president; Roena Bradford, of Roena Bradford Secretary Service, secretary; Calvin Bains, Bains Press, treasurer; and Cotton McCoy, Western Newspaper Union, publicity chairman.

Members who were elected to the board of directors include Sarah Quigles, United Gas; Claydee Walton, president, Walton Press; Robert Hall, H&R Duplicating; Clark Strahan, Louisiana Paper Co.; and Mr. McCoy.

Committee chairmen also were appointed for the year. They are William Gains, educational; Thomas Henderson, membership; Mr. Hall, photography; Mrs. Quigles, editor of the "Lens"; and Fran Wilkens, printing.

Dallas

Members Tour Ink Company

A tour of the Texas Printing Ink Co., Dallas, highlighted the August meeting of Dallas Litho Club. Following a talk by Jack Brumley on pressroom problems and the ways modern ink manufacturers can help solve them, members were shown complete ink manufacturing processes.

Eli Aguilar, supervisor of the offset department, Pease Printing Co., was

named "Man of the Month" by the club. Mr. Aguilar is a charter member of the club and has served on numerous committees and the board of governors. He was an instructor for the color separation school held recently by the club.

The annual club picnic was conducted Aug. 25.

The July meeting was held in the form of a combination tour of the plants of Arnold Taylor, Inc., and William S. Henson, Inc.

At the Taylor plant, a demonstration of the Pitman process of the Unicote copper aluminum plate was presented by Edward Devers, Pitman representative. A two-color Miehle press at Henson was demonstrated.

Philadelphia

Fall Outing Scheduled

The fall outing of the Philadelphia Litho Club will be held Sept. 29 at the Valley Forge Country Club, Valley Forge, Pa. Howard Hatchke will be in charge of the program.



The rapidly approaching deadline, Sept. 28, for entries in the P.I.A. Self-Advertising Exhibition and Awards is called to attention by Miss Nancy Shortreed. All entries should be mounted on 13 x 20" sheets of black paper or board. Fill in complete information on entry blanks and mail to Miller Printing Machinery Co., 1101 Reedsdale St., Pittsburgh 33, Pa., by 5 p.m., Sept. 28. Winners will receive the "Benny" and cash award.

Anniversary Committee Selected

An executive committee made up of top-level spokesmen for the graphic arts industry, labor and related groups, has been formed to sponsor the commemoration this October of the 500th anniversary of the origin of printing.

This announcement was made by Milton J. Goger, president of American Type Founders Co., Inc., and chairman of the newly-formed committee. Other members of the committee include: William Dwight, president, American Newspaper Publishers Association; Robert D. Holbrook, chairman of the board, American Association of Advertising Agencies; David L. Luke, Jr., president, American Paper and Pulp Association, and George Meany, president, AFL-CIO.

In addition, a special graphic arts division of the committee includes: Walter T. Armstrong, Sr., president, Advertising Typographers Association; Harold R. Dantuma, president, International Typographic Composition Association; Rex G. Howard, president, National Association of Photo Lithographers; J. R. Jackman, president, Printing Industry of America, Inc.; Carl N. Reed, president, Lithographers National Association; R. C. Walker, president, American Photo Engravers Association, and George Wise, president, National Association of Printing House Craftsman, Inc.

The five hundred year anniversary dates back to the completion of the 42-line Gutenberg bible in 1456, the first established date for the completion of a manuscript through the use of movable type.

Among the numerous activities scheduled for the commemoration of the quincentenary anniversary of the origin of printing is a special newspaper supplement that will be made available to every newspaper in the nation for use as an added feature during Newspaper Week, October 1-8. Included in the supplement will be articles and features depicting the history and growth of the graphic arts.

An open letter from President Eisenhower, addressed to the sponsoring committee, will appear in the supplement.

Litho Club Guide

BALTIMORE

Norwood A. Heselbach, Secy.
720 East Pratt St., Baltimore 2, Md.

BOSTON

Thomas J. Cain, Secy.
Hub Offset Co.
175 Purchase St., Boston 10

BUFFALO

Vic Reisch, Secy.
33 Eiseman Ave., Kenmore 17, N.Y.

CANTON, Ohio

Jack R. Reinart, Secy.
1012 Maryland Ave., S.W., Canton

CHICAGO

Fred L. Faulkner, Secy.
Chief Printing Co.

CINCINNATI

Peter Schannes, Secy.
Mail-Way Advertising Co.
229 East Sixth St.
Cincinnati 2, Ohio

CLEVELAND

Russell B. Waddell
5308 Blanche Ave., Cleveland, O.

CONNECTICUT VALLEY

Thomas Murice
521 So. Main St.
West Hartford, Conn.

DALLAS

Lee Phenix
1802 Akard St., Dallas, Tex.

DAYTON

Richard Clark, Secy.
740 Vine St., Piqua, O.

DETROIT

John Murphy, Secy.
13100 Santa Rosa, Detroit

HOUSTON

Chloe Lee Mallet
2104 Wichita, Houston 4, Tex.

LOS ANGELES

Ernest A. Szabo
1323½ W. 93rd St.,
Los Angeles 44, Cal.

MILWAUKEE

Allan N. Williams, Secy.
4463 N. Morris Blvd., Milwaukee 11,
Wis.

NEW YORK

Tom Cavallero
Schlegel Litho. Corp.
2nd Ave. & 22nd St., New York

ONTARIO

The Secretary, Ontario Litho Club
c/o The Canadian Lithographers
Ass'n, Inc.
4 Wellington St., E., Toronto, Ont.

PHILADELPHIA

Joseph Winterburg, Secy.
622 Race Street, Philadelphia 6
Meets 4th Monday

QUEBEC

John Martin, Secy.
Gazette Printing Co., Ltd.
1000 St. Antoine St., Montreal, Canada

ROCHESTER

Roy Bippes, Secy.
87 Pleasant Ave., Rochester 22, N.Y.

ST. LOUIS

Eugene J. Hanson, Jr., Secy.
4440 Bessie Ave., St. Louis 15, Mo.

TWIN CITY

Marvin Haenzen, Secretary
1405 Chicago Ave.,
Minneapolis 4, Minn.

WASHINGTON

H. Thos. Driver, Secy.
PO Box 952, Benj. Franklin Sta.
Washington, D.C.

Meets 4th Tuesday

NAT'L ASS'N OF LITHO CLUBS

Elton N. Baker
9134 Oak Park Ave., Morton Grove,
Ill.

**per
hour**

GO WEB
for BIG PROFITS
GO MILTON

MILTON-4 gives QUAD PRODUCTION

yet lower-priced than a 22×34 sheet fed single color

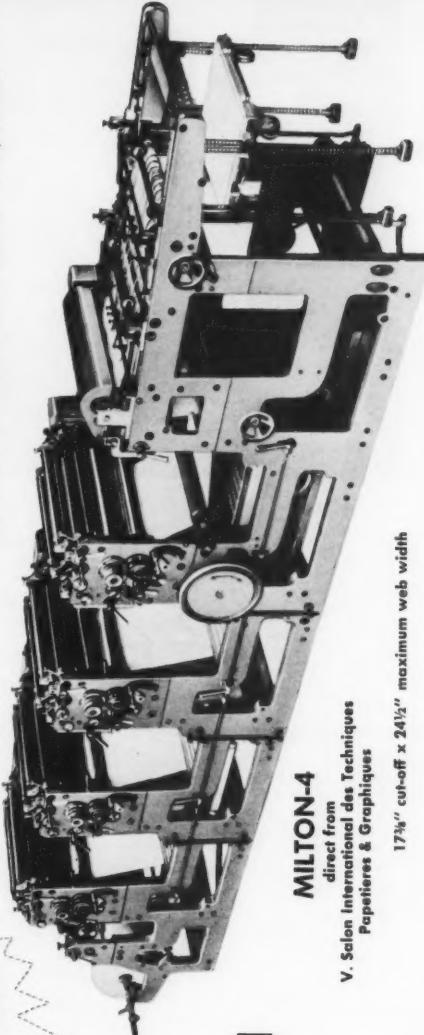
4 SIDES PRINTING with 2 ROLLS

YES, Mr. Printer, the MILTON-4 can do this for you, too. The MILTON-4 produces good quality offset printing in 1 to 4 colors. This low-priced web offset press is fast becoming the daily "work-horse" in the industry, giving high-speed production plus quality.

Give your salesman a break. Give him something different to sell. Give him COLOR. Give MILTON-4 QUAD PRODUCTION in 1 to 4 colors, and beat all competition.

MILTON-4

gives



MILTON-4

V. Salon International des Techniques Papetières & Graphiques
direct from

17 $\frac{3}{4}$ " cut-off x 24 $\frac{1}{2}$ " maximum width



PRINTING WITH:

INDIA 103

- PRINTING WITH:**

 - Small and large runs profitably produced with fast make-ready and simplicity of operation
 - Multiple Color Combinations. Extra COLOR can mean the job.
 - Paper Costs reduced 8 to 10% in rolls
 - High-Speed Production from 8,000 to 12,000 per hour
 - Tension Control insures register
 - Air Noiseless Delivery handles all stocks from light onion skin to 12" board
 - Incorporates many features of larger presses, scaled to your pocketbook.
 - Register adjusted while press in operation
 - Plates interchangeable with 17 x 22 sheeted presses

2 Rolls

1 plus 1 and 1 plus 1 colors delivering 16-page signature, or 8-page tabloid, 8,000 to 12,000 per hour

or

2 colors front delivering 2 color circulars or letters, 60,000 to 80,000 per hour

or

2 color broadsides, 17 $\frac{1}{2}$ " up to 24 $\frac{1}{2}$ " 15,000 to 25,000 per hour

1 Roll

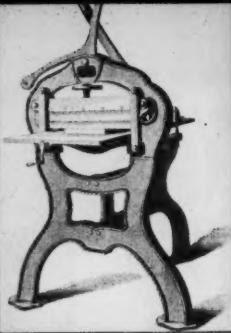
1 plus 3 colors—2 plus 2 colors—4 colors 1 side delivered folded or sheeted

ACME MACHINERY DIVISION
West Houston Street New York City
Oregon 4-0688

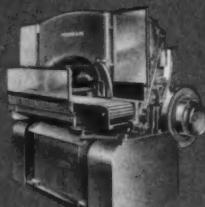
Bookbinding Equipment
Die-Cutters
Paper Cutters
3 Years' Experience

Orbison 4-0688
Lester Sleel New York City

See us at the



Offer built in 1865 in Kari Krause plant now manufacturing POLYGRAPH cutters.



A-112
44" cutter up to 65"



Tri-Cut Super
3-Knife Trimmer
13 x 20"



DEFA
Offset Proof Press
automatic
3 sizes



Tri-Cut, Jr.
10 x 14"

Tri-Cut, Sr.
12 x 37"

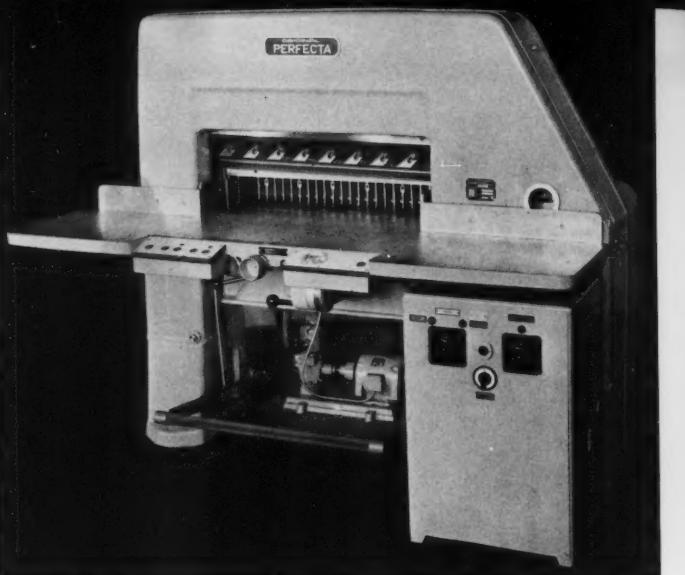


"Back-Saver"
fully automatic pile lift
up to 1 ton

CUT CUTTER COSTS

Available in
14 Models
and
sizes from
32½" to 65"
with and without
Automatic Spacers
and
Airtables

Your Best Buy
BUY DIRECT
&
SAVE
Up to 50%



42" Original
PERFECTA

Elbe File & Binder Co., Inc.

Manufacturers of Loose-Leaf Products Since 1909

ELBE
FILE & BINDER CO., INC.

PAUL RIVER, MASSACHUSETTS

Acme Litho Plate Graining, Inc.
118 Bleeker St.
New York 12, N. Y.

Attn: Mr. Milton Berg, President

June 4th, 1956

Subject: Perfecta Paper Cutter

Dear Mr. Berg:

It is with a great deal of pride and satisfaction that we relate our experience with the Perfecta Paper Cutter.

We have had in our Cutting Department which has performed outstandingly a 50" Perfecta Paper Cutter which has performed outstandingly with the cutting of paper, board, fibre, and bindery materials. This machine is the work-horse of the department and carries the bulk of our cutting requirements.

Although this machine is quite old we are still obtaining very satisfactory service from it with a very low maintenance cost. It was also very pleasing to find within the past year that cost of your organization parts for this machine were available through the ability of your skilled mechanic. With your services and confidence in continuing with the use of this equipment, we feel much more secure in continuing with the use of this equipment in our Company.

Again, may we thank you for your cooperation.

Very truly yours,
ELBE FILE & BINDER CO., INC.
Andrew M. Marshall

PERFECTA DELIVERS THE GOODS!
30 years in operation is your guarantee of Perfecta life-long service and delivery of parts.

Liberal Trade-in Allowances

ACME MACHINERY DIVISION

Acme Litho Plate Graining Inc.

34 West Houston Street New York City

ORegon 4-0688

Sole Distributors for **POLYGRAPH Graphic Arts Equipment**

PERFECTA and POLYGRAPH Paper Cutters are designed and built in the original factories with skilled German workmanship. The POLYGRAPH factories building these cutters,

(formerly sold in the U.S.A. under the name of Kari Krause) are now celebrating their 100th Anniversary. This is your GUARANTEE for QUALITY and PERFORMANCE.

OFFSET PRESS SPECIFICATIONS

Revised by Modern Lithography to September, 1956

	Press Designation	Sheet Size Limits	Maximum Size Print	Minimum Gripper Margin	Plate Dimensions	Plate Thickness	Cut of Plate Cyl.	Blanket Dimensions	Blanket Thickness	Cut of Blanket Cyl.
MIEHLE Miehle Printing Press & Mfg. Co. 14 St. & S. Damen Ave. Chicago 8, Ill.	Miehle No. 17 Litho Print	4 1/8 x 8 1/4 to 14x20	13x17 1/4	3/8"	14 1/2 x 17 1/4	.005	.001f	16 1/8 x 17 1/4	.065"	.071"
	Miehle No. 29 Single-Color	11x16 to 23x29	22 5/8 x 29	3/8"	26 1/4 x 31	.012f	.0155f	30 5/16 x 31 1/8	.065"	.080"
	Miehle No. 36 Single-Color	11x16 to 23x36	22 5/8 x 35 1/4	3/8"	26 1/4 x 36	.012f	.0155f	30 5/16 x 36 1/4	.065"	.080"
	No. 38 One Color Two Color	11x16 to 25 1/2 x 38	25 1/8 x 38	3/8"	29 1/4 x 38 1/2	.016f	.0155f	32 1/8 x 39 1/4	.085"	.080"
								Extension delivery (high pile) single color		
	Miehle No. 41 Single-Color	19x25 to 30x42	29 1/8 x 42	3/8"	36 1/4 x 42 1/2	.016f	.022f	39 1/8 x 43 1/4	.065"	.080"
	Miehle No. 41 Two-Color	19x25 to 30x39	29 1/8 x 39	3/8"	36 1/4 x 42 1/2	.016f	.022f	39 1/8 x 43 1/4	.065"	.080"
	Miehle No. 49 Single-Color	19x25 to 36x49 1/2	35 1/8 x 49 1/2	3/8"	40 1/4 x 50	.016f	.022f	43 1/8 x 51	.065"	.080"
	Miehle No. 49 Two-Color	19x25 to 36x49 1/2	35 1/8 x 49 1/2	3/8"	40 1/4 x 50	.016f	.022f	43 1/8 x 51	.065"	.080"
	Miehle No. 61 One-Color, Two-Color, Three-Color, Four-Color, Five-Color	22x34 to 42x58	41 1/8 x 58	3/8"	47 1/4 x 59	.024f	.025f	47x60 1/2	.065"	.090"
<hr/>										
Notes:	—Unless otherwise specified by customer									
*	—Miehle True Rolling Patent No. 2,036,835									
	Miehle No. 76 One-Color Two-Color Three-Color Four-Color Five-Color	28x42 to 52x76	51 1/8 x 76	3/8"	58x77	.024f	.025f	57x77 1/2	.065"	.090"
						Packing plate above bearer	.010**			
Speed Range	Feeder	Feeder Capty.	Delivery	Delivery Capacity	Number and Sizes of Covered Inking Rollers	Number and Sizes of Covered Dampeners	Approximate Weight	Approximate Floor Space	Electrical Specifications	
Up to 5000	Sheet by Sheet	10"	Stripper	4"	2 Form 2 3/8" 2 Form 2 3/8" 1 Doctor 2 3/8"	None (Miehle Fount System)	1,120 lbs.	3'5" x 3'7"	Press 3/4 H.P.	
3000 to 7000	Stream	48"	Chain	21 1/2"	4 Vibr. Rider 2 3/8" 2 Form 2 3/8" 1 Rider 2 3/8" 2 Rider 2"	2 Form 2 9/16" 1 Doctor 2 3/8"	10,100 lbs.	Ht. 4'6" 7'4" x 10'8" Ht. 6'1 1/2"	Press 4 H.P.	
3000 to 6500	Stream	48"	Chain	21 1/2"	Same Except 1 Rider 2"	1 Doctor 2 3/8"	11,150 lbs.	7'10" x 10'10" Ht. 6'1 1/2"	Press 4 H.P. Motor	
Up to 7000 press (special equipment)	Stream	41 1/2"	Chain	21 1/2" 38"	1 Form 2 3/8" 1 Form 3 1/4" 2 Form 2 3/8" 1 Doctor 2 3/8" 5 Transf. 2 3/8" 2 Transf. 2"	2 Form 2 9/16" 1 Doctor 2 3/8"	13,250 lbs. 23,150 lbs. 18,300 lbs.	8'6 1/2" x 10'11 1/2" 8'9 1/2" x 18'2 1/2" 8'9 1/2" x 16'10 9/16"	6.5 H.P. 11 H.P. 8 H.P.	
3400 to 6800	Stream	38 1/2"	Chain	39 1/2"	2 Form 3 9/16" 1 Form 3 13/16" 1 Form 4 5/16" 1 Doctor 3 1/4" 3 Trans. 2 15/16"	2 Form 3 3/8" 1 Doctor 3 3/16"	26,450 lbs.	12'1" x 21'2 1/2" Ht. 8'1 1/2"	Press 11 H.P. Motor	
3400 to 6800	Stream	55"	Chain	41 1/2" (Same)		2 Form 3 3/8" 1 Doctor 3 3/16"	36,200 lbs.	13' x 22'5 1/2" Ht. 9'4 1/2"	Press 16 H.P. Motor	
3200 to 6500	Stream	38 1/2"	Chain	39 1/2"	2 Form 3 9/16" 1 Form 3 15/16" 1 Form 4 5/16" 1 Doctor 3 1/4" 3 Trans. 2 15/16" 4 Trans. 3%"	2 Form 3 3/8" 1 Doctor 3 3/16"	27,550 lbs.	12'8 1/2" x 21'2 1/2" Ht. 8'1 1/2"	Press 11 H.P. Motor	
3200 to 6500	Stream	55"	Chain	41 1/2" (Same)		2 Form 3 3/8" 1 Doctor 3 3/16"	40,100 lbs.	13'7 1/2" x 22'5 1/2" Ht. 9'4 1/2"	Press 16 H.P. Motor	
3600 to 6500	Dexter Stream	45"	Chain	47 1/2"	(For each color) 2 Form 4" 2 Form 3 1/2" 2 Vibr. Rider 3 1/2" 1 Drum Rider 3 1/2" 1 Drum Rider 3 1/2" 4 Rider 3" 1 Doctor 3 1/2"	(For each color) 2 Form 3 1/2" 2 Vibr. Rider 3 1/2" 1 Drum Rider 3 1/2" 1 Drum Rider 3 1/2" 4 Rider 3" 1 Doctor 3 1/2"	1-col. 44,900 lbs. 2-col. 69,900 lbs. 3-col. 94,700 lbs. 4-col. 119,200 lbs. 5-col. 143,800 lbs.	1-col. 28'1" x 12'10" 2-col. 30'7 1/2" x 12'10" 3-col. 35'2" x 12'10" 4-col. 39'9 1/2" x 12'10" 5-col. 44'3" x 12'10" Ht. 7'11"	1-col. 20 H.P. 2-col. 25 H.P. 3-col. 40 H.P. 4-col. 50 H.P. 5-col. 50 H.P.	
3300 to 6000	Dexter Stream	48"	Chain	50 1/2" (Same as above)	(Same as above)	(Same as above)	1-col. 58,500 lbs. 2-col. 90,900 lbs. 3-col. 122,400 lbs. 4-col. 154,500 lbs. 5-col. 186,400 lbs. Ht. 8'6"	1-col. 28'6" x 14'3" 2-col. 33'2" x 14'3" 3-col. 39'1" x 14'3" 4-col. 44'3" x 14'3" 5-col. 49'6" x 14'3"	1-col. 20 H.P. 2-col. 30 H.P. 3-col. 40 H.P. 4-col. 50 H.P. 5-col. 60 H.P.	

	Press Designation	Sheet Size Limits	Maximum Size Print	Minimum Gripper Margin	Plate Dimensions	Plate Thickness	Cut of Plate Cyl.	Blanket Dimensions	Blanket Thickness	Cut of Blanket Cyl.
ATF—WEBENDORFER American Type Founders, Inc. 200 Elmora Avenue Elizabeth B., N. J.	ATF Chief 20 14x20"	8x10 to 14x20	13 1/2 x 19 1/2*	1/4"	15 1/2 x 20 1/2	.008" to .012"	.012"	16x20	.065"	.071"
	ATF Chief 22 17x22"	8x10 to 17 1/2 x 22 1/2	17 1/4 x 22*	1/4"	20x22 1/2	.012" or .028"	.015" or .030"**	22x22 1/2	.065"	.071"
	ATF Chief 24 17x24"	8 1/2 x 11 to 17 1/2 x 24 1/2	17 1/2 x 24 1/2*	1/4"	19 1/2 x 24 1/2	Up to .012"	.0165"	21 11/32x 24 1/2"	.065"	.075"
	ATF Chief 20 22x28"	11x17 to 23x29	22x28*	1/4"	27 1/4 x 28 1/2	.012" or .028"	.015" or .030"**	27x28 1/2	.065"	.071"
	ATF Super Chief	10x14 to 23x30	22 5/8 x 29 1/2*	1/4"	27 1/4 x 30	.012" or .028"	.105" or .030"**	27x30	.065"	.071"
	ATF Green Hornet Two-Color Web-Fed Job Press— 11x17"	17 1/2 Max. Web Width 8 Min. Web Width 11 1/2 Length	17 1/2 Max. Width 10 1/2 Max. Length 11 Length with Gap Manipulation	3/4" Non-Printing Gap	14x17 1/2	Up to .012"	.010"	13 3/8 x 18	.065"	.071"
ATF—Webendorfer Web-fed Offset Presses	Publication, Form, Web Color and Specialty Presses built to customers' specifications									* Except trip sheet

ATF—MANN

American Type Founders, Inc.
200 Elmora Ave.
Elizabeth B., N. J.

Note: Figures for Feeder Capacity include 9 1/4" high skid. Figures are for Standard Rear Loading. Standard Side Loading and Continuous Feed Rear Loading figures are different. Delivery Capacity figures include skid.

22x34" N-135 Single Color	11x15 to 23x36	22 1/2 x 35 1/2	5/16"	25 1/2 x 36	Up to .025"	33 1/2 x 36 1/2	.065" or .075"
25x38" L-136 Single Color	13x16 1/2 to 25 1/2 x 38"	24 1/2 x 36	5/16"	29 1/2 x 38 1/2	Up to .025"	39x37	.065" or .075"
30x42" L-142 Single Color	13x22 to 30 1/2 x 43 1/2	29 1/2 x 42	5/16"	34 1/2 x 42 1/2	Up to .025"	45x43	.065" or .075"
35x45" L-148A Single Color	17x22 to 36 1/4 x 48 1/2	35 1/4 x 48	5/16"	40 1/4 x 48 1/2	Up to .025"	51 1/2 x 48 1/2	.065" or .075"
42x54" L-154C Single Color	17x31 1/2 to 42x54	41 1/8 x 53 1/2	5/16"	46 1/2 x 54	Up to .025"	57x54 1/2	.065" or .075"
42x59" L-159C Single Color	17x34 to 42x59	41 1/8 x 58 1/2	5/16"	47 1/4 x 59	Up to .025"	57x59 1/2	.065" or .075"
42x65" L-165C Single Color	17x34 to 42x65	41 1/8 x 64 1/2	5/16"	47 1/4 x 65	Up to .025"	56 1/2 x 65 1/2	.065" or .075"
25x38" L-236 Two-Color	13x16 1/2 to 25 1/2 x 38"	24 1/2 x 36	5/16"	29 1/2 x 36 1/2	Up to .025"	39x37	.065" or .075"
30x42" L-242 Two-Color	13x22 to 30 1/2 x 43"	29 1/2 x 42	5/16"	34 1/2 x 42 1/2	Up to .025"	45x43	.065" or .075"
35x45" L-248A Two-Color	17x22 to 36 1/4 x 48 1/2	35 1/4 x 48	5/16"	40 1/4 x 48 1/2	Up to .025"	51 1/2 x 48 1/2	.065" or .075"
42x54" L-254C Two-Color	17x31 1/2 to 42x54	41 1/8 x 53 1/2	5/16"	46 1/2 x 54	Up to .025"	57x54 1/2	.065" or .075"
42x59" L-259C Two-Color	17x34 to 42x59	41 1/8 x 58 1/2	5/16"	47 1/4 x 59	Up to .025"	57x59 1/2	.065" or .075"
42x65" L-265C Two-Color	17x34 to 43x65	42x64 1/2	5/16"	47x65	Up to .025"	56 1/2 x 65 1/2	.065" or .075"
Perfector LP-53	17x32 to 38x53 1/2	37x53	3/8"	42x53 1/2	Up to .025"	53x54	.065" or .075"

Braceless Operation—plate cylinder packed to .080"

Speed Range	Feeder	Feeder Capt.	Delivery	Delivery Capacity	Number and Sizes of Covered Inking Rollers	Number and Sizes of Covered Dampeners	Approximate Weight	Approximate Floor Space	Electrical Specifications
Stepless 3200 or 5500	Vacuum Air	17 1/4"	Chain Auto. Receding Pile	.14"	1 Form 2 3/16" 1 Form 2 5/16" 3 Distrs. 1 1/4" 1 Ductor 1 1/2"	2 Plate 2 1/4" 1 Ductor 1 1/2"	1750 lbs. net	44 1/4"x56 1/4"	Drive 3/4 H.P. Pump 3/4 H.P.
Stepless from 2700 to 5500	Vacuum Air	17 1/4"	Chain Auto. Receding Pile	16 1/2"	3 Form 2 1/2", 2 5/8", 2 3/16" 6 Distrs. 2" 1 Ductor 2"	2 Plate 2 1/4" 1 Ductor 2 1/4"	3200 lbs. net	51x76"	Drive 1 1/2 H.P. Pump 1 H.P.
Stepless from 2700 to 6000	Elliss Stream	16 1/4"	Chain Auto. Receding Pile	16 1/2"	3 form { 2 3/4" 2 1/2" 2 5/16" 6 Distrs. 2" 1 Ductor 2"	2 Plate 2 1/4" 1 Ductor 2 1/4"	3600 lbs. net	56x77"	Drive 2 H.P. Pump 1 H.P.
Variable 3000 to 5000	Reloading Double Pile Vacuum Air	22 5/8"	Chain Auto. Receding Pile	16"	2 Forms 2 3/4" 2 Forms 2 5/8" 6 Distrs. 2" 1 Ductor 2"	2 Plate 2 1/4" 1 Ductor 2 1/4"	3700 lbs. net	63x89"	Drive 3 H.P. Pump 1 H.P.
Stepless from 2800 to 7000	Stream & Sheet Combination	38"	Floor Loading Re-loading	19"	2 Forms 2 5/8" 2 Forms 2 9/16" 1 Form 2 1/2" 5 Distrs. 2" 1 Ductor 2"	2 Plate 2 1/4" 1 Ductor 2 1/4"	7600 lbs.	70 1/2"x97 1/2"	Drive 3 H.P. Pump 1 1/2 H.P.
Up to 25,000 Stepless Through Complete Range	Web or Roll	Up to 40"	Sheet Dia. Rolls	11 1/2" Cut Off Length	2 Forms 2 3/8" 4 Distrs. 1 1/4" 1 Ductor 1 1/4" (Each Unit)	2 Plate 2" 1 Ductor 1 1/4"	4000 lbs.	48"x133"	Drive 5 H.P.

** On special order for dry offset printing only

Up to 7000	40 1/4"	Auto. Receding Pile	24 1/2"	2 Form 2 7/8" 2 Form 2 3/8" 2 Dist. 2 1/2" 3 Dist. 2 1/2" 1 Dist. 2 1/2" 1 Ductor 2 1/2"	2 Plate 2 1/4" 1 Ductor 2 1/2"	9,744 lbs.	7'11"x8'8"	Drive 7 1/2 H.P. Pump 2 H.P.
Up to 5500	48 1/4"	Auto. Receding Pile	48"	2 Form 3 11/32" 2 Form 2 5/8" 3 Dist. 2 3/8" 5 Dist. 2 3/8" 1 Ductor 2 3/8"	2 Plate 2 15/16" 1 Ductor 2 3/8"	17,584 lbs.	18'6"x9'6"	Drive 7 1/2 H.P. Feeder Hoist 2 H.P. Feeder 2 H.P. Suct. Roller 1 1/2 H.P. Hoist 2 H.P.
Up to 5500	48 1/4"	Auto. Receding Pile	48"	Same	2 Plate 2 15/16" 1 Ductor 2 3/8"	18,928 lbs.	18'9"x10'0"	Same
Up to 5000	55 1/4"	Auto. Receding Pile	44 3/4%"	2 Form 3 15/16" 2 Form 3 35/64" 3 Dist. 3 5/32" 4 Dist. 2 1/2" 1 Dist. 2 3/8" 1 Ductor 2 3/8"	2 Plate 3 7/16" 1 Ductor 3 3/8"	29,120 lbs.	20'6"x11'0"	Drive 10 H.P. Feeder Hoist 2 H.P. Feeder 2 H.P. Suct. Roller 1 1/2 H.P. Del'y Hoist 2 H.P.
Up to 5000	45 1/4"	Auto. Receding Pile	44 3/4%"	Same	Same	30,460 lbs.	21'3"x11'0"	Same Except Suct. Roller 2 H.P.
Up to 5000	48 1/4"	Auto. Receding Pile	46 1/4%"	Same	Same	32,030 lbs.	21'6"x12'3"	Same Except Drive 15 H.P.
Up to 4500	58 1/4%"	Auto. Receding Pile	46 1/4%"	Same	Same	32,030 lbs.	22'0"x13'0"	Same
Up to 5500	39 1/4%"	Auto. Receding Pile	48"	For each color 2 Form 3 11/32" 2 Form 3 35/64" 3 Dist. 3 5/32" 5 Dist. 2 3/8" 1 Ductor 2 3/8"	For each color 2 Plate 2 15/16" 1 Ductor 2 3/8"	24,976 lbs.	19'0"x9'0"	Drive 10 H.P. Feeder Hoist 2 H.P. Feeder 2 H.P. Suct. Roller 1 1/2 H.P. Del'y Hoist 2 H.P.
Up to 5500	39 1/4%"	Auto. Receding Pile	48"	For each color 2 Form 3 15/16" 2 Form 3 35/64" 3 Dist. 3 5/32" 4 Dist. 2 3/8" 1 Dist. 2 3/8" 1 Ductor 2 3/8"	For each color 2 Plate 3 7/16" 1 Ductor 3 3/8"	26,880 lbs.	19'10"x10'0"	Same
Up to 5000	45 1/4%"	Auto. Receding Pile	44 3/4%"	Same	Same	44,684 lbs.	23'10"x11'0"	Same Except Suct. Roller 2 H.P.
Up to 5000	47 1/4%"	Auto. Receding Pile	46 1/4%"	Same	Same	48,608 lbs.	24'8"x12'3"	Same Except Drive 20 H.P.
Up to 4500	47 1/4%"	Auto. Receding Pile	46 1/4%"	Same	Same	48,608 lbs.	24'8"x14'0"	Same
Up to 5000	53 3/4%"	Auto. Receding Pile	68 1/4%"	Same	Same	34,950 lbs.	21'0"x11'6"	Same Except Drive 15 H.P.

HTB Stream Feeder—on all models, with double pile rebanding.
Electric hoist on all models except N135.

	Press Designation	Sheet Size Limits	Maximum Size Print	Minimum Griper Margin	Plate Dimensions	Plate Thickness	Cut of Plate Cyl.	Blanket Dimensions	Blanket Thickness	Cut of Blanket Cyl.
HARRIS Harris-Seybold Co. 4510 East 71 St. Cleveland 5, Ohio	14½x20½" Single-Color Model 120	8x10 to 14½x20½	14½x20	¼"	16¾x20½	To customers' specifications	21x20½		.062" to .065"	
	23x30" Single-Color Model 130	10x14 to 23x30	22½x20½ or 19x29½	5/16"	27¾x30 or 22½x30	.012"	29¾x30		.062" to .065"	
	23x30" Single-Color Model 130-FB		21½x20½		24¾x30					
	23x36" Single-Color Model 136	11x17 to 23x36	22½x25½	5/16"	25½x36	.012"	29½x36		.062" to .065"	
	23x36" Two-Color Model 236		30½x25½		34½x43					
	31x43" Two-Color Model 238	17x22 to 31x43	28½x42½ or 30½x42½	5/16"	32½x43 or 34½x43	To Customers' specifications	40x43½		.062" to .065"	
	36x49½" Single-Color Model 149	17x22 to 36x49½	35½x49	5/16"	40x49½	To Customers' specifications	45x50		.062" to .065"	
	Two-Color Model 249									
	43x59 Single-Color Model 159	22x34 to 43x59	42½x58½	5/16"	47¾x59	To Customers' specifications	52½x59½		.062" to .065"	
	Two-Color Model 259									
	Four-Color Model 459									
	Five-Color Model 559									
	52½x77" Single-Color Model 177	25x38 to 52½x77	52½x76½	5/16"	56x77 or 57½x77	To Customers' specifications	62½x77½		.062" to .065"	
	Two-Color Model 277									
	Four-Color Model 477									
	Five-Color Model 577									
	36x36" MDE Single-Color (Metal Decorator)	18x24 to 36x36	36¾x35¾ or 34 11/16x35¾	3/32"	37¾x36 or 37x36	To Customers' specifications	49x37		.062" to .065"	
	Two-Color MDF (Metal Decorator)									
	36x43" MDB Two-Color (Metal Decorator)	18x24 to 36x43	36¾x42¾	3/32"	37¾x43	To Customers' specifications	49x44		.062" to .065"	

LEVEY
Fred H. Levey Co., Inc.
Div. of Columbian Carbon Co.
4901 Grays Avenue
Philadelphia 48, Penna.

Web Presses
Offset
Rubber Plate
and Gravure

Built in any size and any arrangement to suit customers' requirements.

HESS & BARKER
212 S. Darien St.
Philadelphia 7, Penna.

Web Presses
Offset
Rubber Plate
Gravure
Letterpresses

Built in any size and any arrangement to suit customers' specifications.

CONSOLIDATED
International Equipment & Supply Co.
1112 N. Homan Ave.
Chicago 51, Ill.

16x20" Consolidated Filia Single-Color	8x10 to 16x20	15½x19½	5/16"	19¾x19¾	Up to .018"	23½x20 5/64	.075"
18½x24¾" Consolidated Pearl "24" Single-Color	8x10 to 18½x24¾	17½x23½	5/16"	22x24¾	Up to .018"	29½x25 5/16	.075"
31x44" Consolidated Diamond Single-Color	19¾x27½ to 31x44	30 7/64 Y 43 5/16	%"	36x44½	Up to .020"	42¾ X 43 15/16	.075"
25x38" Consolidated Star Sapphire Two-Color	14x20 to 25x38	25¾x37½	%"	30x37½	Up to .020"	39x38¾	.075"
19x25" S Consolidated Pearl "25" Single-Color	8x10 to 19x25	18½x24½	5/16"	22¾x24¾	Up to .020"	29½x25 5/16	.075"
22x50" Consolidated Jewel Single-Color	8x10 to 22x51	21½x30 5/16	%"	28¾ X 30 5/16"	Up to .020"	27¾x31¾	.075"

**ZARKIN MACHINE
CO., INC.**
34-19 10th Street
Long Island City 6, New York, N. Y.

Royal Zenith 29 Single Color	8½x11 to 23x30	22½x30	5/16"	26¾x30½	Up to .025"	.026"	33½x31	.065" (2) .146"
---------------------------------	----------------------	--------	-------	---------	-------------	-------	--------	--------------------

Speed Range	Feeder	Feeder Capty.	Delivery	Delivery Capacity	Number and Sizes of Covered Inking Rollers	Number and Sizes of Covered Dampeners	Approximate Weight	Approximate Floor Space	Electrical Specifications
7000	Single Sheet	18"	Harris Receding Pile	18"	2 Form 1 1/4" 1 Form 1 1/8" 1 Duct 1 1/4" 4 Vibrator 2.666"	2 Damp. 2" 1 Duct 2"	4000 lbs.	4'0"x5'6"	
6500 7500	Harris Stream	45"	Harris Receding Pile	19"	2 Form 1 1/4" 2 Form 1 1/8" 2 Dist. 2 1/4" 4 Inter. 1 11/16" 1 Duct 2 1/4"	2 Damp. 2 1/4" 1 Duct 2"	7100 lbs. 7400 lbs.	7'2"x9'8" 7 1/2"x10'6 1/2"	
7000	Harris Stream	48"	Harris Receding Pile	18 1/2" 36 1/2"	2 Form 2" 2 Form 2 1/4" 6 Dist. 2 1/4" 1 Duct 2 1/4"	2 Damp. 2 1/4" 1 Duct 2"	8,250 lbs. 13,600 lbs.	6'10 1/2"x10'5 1/2" 6'10 1/2"x16'5 1/2"	
6500	Harris Stream	42"	Harris Receding Pile	40"	2 Form 3 1/4" 2 Form 3 1/2" 7 Dist. 3 1/4" 1 Duct 3 1/4"	2 Damp. 3 1/16" 1 Duct 3 1/16"	37,500 lbs.	11'7 1/4"x23'11 1/2"	
6500	Harris Stream	42"	Harris Receding Pile	40"	2 Form 3 1/4" 2 Form 3 1/2" 7 Dist. 3 1/4" 1 Duct 3 1/4"	2 Damp. 3 1/16" 1 Duct 3 1/16"	24,300 lbs. 40,000 lbs.	10'5 1/2"x20'5 1/2" 12'1/4"x23'11 1/2"	
6500	Harris Stream	42"	Harris Receding Pile	45"	2 Form 3 1/4" 2 Form 3 1/2" 7 Dist. 3 1/4" 1 Duct 3 1/4"	2 Damp. 3 9/16" 1 Duct 3 9/16"	36,500 lbs. 57,750 lbs. 100,500 lbs. 122,000 lbs.	12'9"x24'7" 14'5 1/2"x28'8 1/2" 14'5 1/2"x36'3 1/2" 14'5 1/2"x40'1"	
6000	Harris Stream	49"	Harris Receding Pile	53"	2 Form 3 1/4" 2 Form 4" 7 Dist. 3 1/4" 1 Duct 3 1/2"	2 Damp. 3 1/4" 1 Duct 3 1/4"	54,000 lbs. 87,000 lbs. 152,000 lbs. 185,000 lbs.	14'11"x28'9" 16'3 1/2"x33'3 1/2" 16'3 1/2"x42'4 1/2" 16'3 1/2"x46'9 1/2"	
6000	Optional	Optional			2 Form 3 1/4" 2 Form 3 1/2" 7 Dist. 3 1/4" 1 Duct 3 1/4"	2 Damp. 3 1/4" 1 Duct 3 1/4"	30,000 lbs.	10'x17'11 1/4" Without Pile Feeder	
6000	Optional	Optional			2 Form 3 1/4" 2 Form 3 1/2" 7 Dist. 3 1/4" 1 Duct 3 1/4"	2 Damp. 3 1/4" 1 Duct 3 1/4"	50,000 lbs.	10'x20'5 1/2" Without Pile Feeder	
6000	Optional	Optional			2 Form 3 1/4" 2 Form 3 1/2" 7 Dist. 3 1/4" 1 Duct 3 1/4"	2 Damp. 3 1/4" 1 Duct 3 1/4"	56,000 lbs.	10'6"x26'5 1/2" Without Pile Feeder	

8500	Stream Feeder	48"	Receding Pile	24"	19	5 Patented Water Fountain Brush Roller	6,000 lbs.	9'x4'8" HT. 5'7 1/4"	3.5 H.P.
8500	Stream Feeder	60"	Receding Pile Non-stop	19"	19	5 Patented Water Fountain Brush Roller	7,260 lbs.	10'10"x5'11" HT. 6'4 1/2"	5 H.P.
Up to 8000	Stream Feeder	49"	Receding Pile	48"	10	5	26,000 lbs.	21'3"x11'2" HT. 7'5 1/4"	17 H.P.
6500	Stream Feeder		Receding Pile		38	10	38,000 lbs.	19'x12' HT. 80"	12 H.P.
8500	Stream Feeder	60"	Receding Pile Non-stop	19"	19	5 Patented Water Fountain Brush Roller	7,260 lbs.	10'19"x5'11" HT. 6'4 1/4"	5 H.P.
7000	Stream Feeder	50"	Receding Pile Delivery	26"	19	5	12,500 lbs.	10'2"x5'7" HT. 6'3"	7 H.P.
Up to 7500	Stream	34"	Auto. Rec. Pile	20"		2 Form 2 1/2" 1 Ductor 2 1/2"	3300 lbs.	51"x110"	2 1/2 H.P. Press 2 H.P. Feeder

MILLER EBCO

Miller Printing Machinery Co.
1101 Reeddale St.
Pittsburgh 33, Pa.

Miller E. B. Co. 22x34" Offset Press	11x17 to 23x36	22 1/2x35	5/16"	25 1/2x36	To customers' specifications	26x36	.062" to .065"	.075"
Miller MAN IV 36x42" (One to Four Color)	16 1/2x23 3/8 to 36x49 1/2	30 5/8x44 1/8	3/8"	36 1/2x44 1/2	up to .024"	.026"	46x45 1/8	5/64" .089"

Miller MAN V 36x48" (One to Four Color)	16 1/2x23 3/8 to 36x49 1/2	35 5/8x49 1/8	3/8"	42x50	up to .024"	.026"	50x51 1/4	5/64" .089"
Miller MAN VI 40x52" (Two to Four Color)	19 1/2x25 1/8 to 40 1/4x56	39 3/8x55 1/8	3/8"	45 1/2x56 5/16	up to .024"	.026"	55 1/2x57 1/2	5/64" .089"

BABCOCK

Babcock Printing Press Corp.
PO Box 950
Canton 1, Ohio

Press Designation	Sheet Size Limits	Maximum Size Print	Minimum Gripper Margin	Plate Dimensions	Plate Thickness	Cut of Plate Cyl.	Blanket Dimensions	Blanket Thickness	Cut of Blanket Cyl.
Babcock Offset 19x25"	8x10 to 19 1/2x25 1/2	19x25	3/4"	22 1/2x26	.012"	.015"	23x26	.062"	.070"
HOE R. Hoe & Co., Inc. 910 East 138 St. New York 54, N. Y. Paper Offset Presses	30x42" Hoe Single Color Super-Offset Press	17x22 to 32x43	29 1/4x42 1/8	5/16"	34x43	As specified by purchaser	42x43 1/2	As specified by purchaser	
	41x54" Hoe Single Color Super-Offset Press	19x25 to 42x55 1/2	41 1/2x55	5/16"	45 1/2x55 1/4	As specified by purchaser	54x55 1/2	As specified by purchaser	
	41x54" Hoe Two-Color Super-Offset Press	19x25 to 42x55 1/2	41 1/2x55	5/16"	45 1/2x55 1/4	As specified by purchaser	54x55 1/2	As specified by purchaser	
Other Hoe Web Offset Presses Built to Customer's Specifications	50x72" Hoe One-Color Two-Color Three-Color Four-Color Five-Color Six-Color	28x36 to 50x72	49 1/2x71 1/2	1/2"	54x72 1/2	As specified by purchaser	57 1/2x73	As specified by purchaser	

6
Other Hoe Web Offset Presses Built to Customer's Specifications

RUTHERFORD

Rutherford Machinery Div.
Sun Chemical Corp.
10-10 44th Ave.
Long Island City 1, N. Y.

Rutherford 20x26"	20x26	19 1/2x25	3/4"	22 1/2x27	.012"	.012"	27x25	.062"	.075"
Rutherford 20x29"	20x29	19 1/2x28	3/4"	22 1/2x30	.012"	.012"	30x25	.062"	.075"

Metal Decorating
Press MP3
29x36"

Metal Decorating Press MP3 29x36"	16x20	29x36	3/4"	31 1/2x37	.014"		37 1/4x37 1/2	.062"	
---	-------	-------	------	-----------	-------	--	---------------	-------	--

Trailblazer Web Offset One-Color Two-Color Three-Color Four-Color Five-Color Six-Color	Web Width to 25"	17 1/2x24 1/2		18 1/2x25	.012"	.011"	19 1/2x25 (Unless otherwise specified)	.055"	.059"
Trailblazer Tabloid Web Offset with Collator 8 to 32 pages	Web Width to 25"	17 1/2x24 1/2		18 1/2x25	.012"	.011"	(Unless otherwise specified)		

WEBENDORFER

Webendorfer
Saugatuck, Conn.
(Not ATF-Webendorfer)

Web Presses
Offset
Rubber Plate
and Gravure

Built in any size and any arrangement to suit customers' requirements.

Up to 6600	Reloading Auto. Suction Pile	43"	Inbuilt Auto. Receding Pile	24"	2 Form 2 1/2" 2 Form 2 5/8" 5 Intermediate 2 5/8" 1 Ductor 2 5/8"	2 Form 2 1/2" 1 Ductor 2 1/2"	9,150 lbs. est.	6'x10'	Drive Motor 5 H.P. Feeder Motor 1 1/2 H.P.
Up to 6800	Spless Stream Feeder	39 3/8"	Chain Auto. Receding Pile	39 3/8"	(For each color) 2 Form 3.937" 2 Form 3.543" 6 Distr. 3.150" 2 Distr. 2.559" 1 Ductor 2.953"	(For each color) 2 Damp. 3.543" 1 Ductor 2.953"	2-col. 47,400 2-col. 45,200 3-col. 66,200 4-col. 86,000	1-col. 10'8"x23'6" 2-col. 11'2"x27'2" 3-col. 11'2"x32'2" 4-col. 11'2"x37'1"	1-col. 11.5 H.P. Drive Motor 4 H.P. Feeder Pump 3 H.P. Feeder Motor 2 H.P. Delivery 2-col. 17 H.P. Drive Motor 4 H.P. Feeder Pump 3 H.P. Feeder Motor 2 H.P. Delivery 3-col. 23 H.P. Drive Motor 4 H.P. Feeder Pump 3 H.P. Feeder Motor 2 H.P. Delivery Motor 5.5 H.P. Aux. Dr. Motor 4-col. 29.5 H.P. Drive Motor 4 H.P. Feeder Pump 3 H.P. Feeder Motor 2 H.P. Delivery Motor 5.5 H.P. Aux. Dr. Motor
Up to 6500	Spless Stream Feeder	39 3/8"	Chain Auto. Receding Pile	39 3/8"	(Same as above)	(For each color) 2 Damp. 3.543" 1 Ductor 2.953"	1-col. 47,400 3-col. 69,400 4-col. 90,400	2-col. 11'8"x27'2" 3-col. 11'8"x32'2" 4-col. 11'8"x37'2"	(As above)
Up to 6000	Spless Stream Feeder	39 3/8"	Chain Auto. Receding Pile	39 3/8"	(Same as above)	2 Damp. 3.543" 1 Ductor 2.953"	2-col. 49,600 3-col. 72,700 4-col. 94,800	2-col. 12'2"x27'8" 3-col. 12'2"x32'7" 4-col. 12'2"x37'7"	(As above)
Speed Range	Feeder	Feeder Catty.	Delivery	Delivery Capacity	Number and Sizes of Covered Inking Rollers	Number and Sizes of Covered Dampeners	Approximate Weight	Approximate Floor Space	Electrical Specifications
Up to 7000	Elless Stream	38"	Chain Auto Pile	19"	3 Form $\left\{ \begin{array}{l} 2 \frac{1}{2}'' \\ 2 \frac{9}{16}'' \\ 2 \frac{5}{8}'' \\ 6 Distr. 2'' \\ 1 Ductor 2'' \end{array} \right.$	2 Damp. 2 1/4" 1 Ductor 2 1/4"	Approx. 5,900 lbs.	Approx. 5'x9'	Drive 3 H.P. Pump 1 H.P.
Up to 5000	Dexter	37"	Ext. Pile	38"	4 Form 3 1/2" 4 Distrs. 3 1/2" 1 Ductor 3 1/2"	2 Form 3 1/2" 1 Ductor 3 1/2"	24,000 lbs.	10'-7"x9'-3"	7 1/2 H.P. variable speed control
Up to 4500	Dexter	43"	Ext. Pile	43"	5 Form 3 1/2" 5 Distrs. 3 1/2" 1 Ductor 3 1/2"	2 Form 3 1/2" 1 Ductor 3 1/2"	36,500 lbs.	22'-10"x11'-3"	7 1/2 H.P. variable speed control
Up to 4000	Dexter	43"	Ext. Pile	43"	(For each color) 5 Form 3 1/2" 5 Distrs. 3 1/2" 1 Ductor 3 1/2"	(For each color) 2 Form 3 1/2" 1 Ductor 3 1/2"	69,500 lbs.	27'-7"x13'-0"	10 H.P. variable speed control
Up to 6000	Christensen	48"	Ext. Pile	50"	(For each color) 4 Form 4 1/2" 7 Distrs. 4 3/4" 2 Ductor 4 1/2"	(For each color) 2 Form 4 1/2" 1 Ductor 4 1/2"	1-col. 52,000 lbs. 2-col. 79,000 lbs. 3-col. 105,000 lbs. 4-col. 132,000 lbs. 6-col. 187,000 lbs.	1-col. 28'8"x14'6" 2-col. 33'8"x14'6" 3-col. 38'8"x14'6" 4-col. 43'8"x14'6" 6-col. 58'8"x14'6"	Press: 1-col. 10 H.P.; 2-col. 20 H.P.; 3-col. 25 H.P.; 4-col. 40 H.P.; 6-col. 75 H.P. Feeder: (Electric) 1-col. 3 H.P.; 2-col. 3 H.P.; 3-col. 3 H.P.; 4-col. 3 H.P.; 6-col. 3 H.P. Delivery: (Electric) 1-col. 2 H.P.; 2-col. 3 H.P.; 3-col. 2 H.P.; 4-col. 2 H.P.; 6-col. 2 H.P.
10,000 to 30,000 per hr.	Web or Roll Fed		Ext. Pile	26"	2 Form 2 1/32" 6 Distrs. 1 1/2" 1 Ductor 1 1/2"	2 Form 1 1/2" 1 Ductor 1 1/2"	3,000 lbs.	4'x7'	Press: 1 1/2 H.P. Blower: 1/4 H.P.
Up to 6000 close register 5000	Rutherford Suction Pile	32"	Receding Auto Pile	18"	3 Form 2 9/16" 7 Distributing 2 1/2" 1 Distributing 2 9/16" 1 Ductor 2 1/2"	2-2 1/2" diam. Damp. 1-2 1/2" diam. Ductor	8,800 lbs.	4'-8"x9'-6"	3 H.P. Press 1 1/2 H.P. Feeder
Up to 6000 close register 5000	Rutherford Suction Pile	32"	Receding Auto Pile	18"	(Same as above)	2-2 1/2" diam. Damp. 1-2 1/2" diam. Ductor	9,300 lbs.	5'-1"x8'-0"	3 H.P. Press 1 1/2 H.P. Feeder
4800	Dexter						16,000 lbs.		
Up to 24,000	Web or Roll	40"	Diam- eter Roll	Sheet or Rewind	1 Form 2 3/4" 1 Form 3" 6 Distr. 1 Vibr. Drum 1 Ductor	2 Dampeners 2 1/2" 1 Ductor 2 1/2"	1-col. 6,000 lbs. 2-col. 9,000 lbs. 3-col. 12,500 lbs. 4-col. 16,000 lbs. 5-col. 19,500 lbs. 6-col. 23,000 lbs.	1-col. 5'x16' 2-col. 8'x16' 3-col. 5'x20' 4-col. 5'x22' 5-col. 5'x24' 6-col. 5'x26'	1-col. 10 H.P. 2-col. 10 H.P. 3-col. 10 H.P. 4-col. 15 H.P. 5-col. 15 H.P. 6-col. 15 H.P.
Up to 24,000	Web or Roll			Roll	As Speci- fied by 6 Distrs. Cus- tomers 1 Vibr. Drum 1 Ductor	2 Dampeners 2 1/2" 1 Ductor 2 1/2"	13,000 lbs.	5'x16' Press 7'x22' Collator	10 H.P. Press Motor 1 H.P. Collator 1 H.P. Folder

		Press Designation	Sheet Size Limits	Maximum Size Print	Minimum Gripper Margin	Plate Dimensions	Plate Thickness	Cut of Plate Cyl.	Blanket Dimensions	Blanket Thickness	Cut of Blanket Cyl.
MILTON Web Offset		Planeta 29—One Color	8 1/4 x 11 1/16 to 20 1/2 x 28 1/2	19 7/8 x 28	5/8"	25 1/4 x 28 1/2			29 x 32		
Acme Machinery Division Acme Litho Plate Graining Inc. 34 West Houston Street New York City		Planeta 38—One Color	15 3/4 x 19 11/16 to 26 x 38	25 x 36 1/4	5/8"	26 3/4 x 38 1/2			31 1/2 x 39		
		Planeta 39—One Color	19 3/4 x 21 1/8 to 32 x 39		5/8"	36 5/8 x 44 1/8			45 5/8 x 45 1/4		
		Planeta 39—Two Color	19 3/4 x 21 1/8 to 32 x 39		5/8"	36 5/8 x 44 1/8			45 5/8 x 45 1/4		
		Planeta 44—One Color	17 3/4 x 21 1/8 to 32 x 44		5/8"	36 5/8 x 44 1/8			45 5/8 x 45 1/4		
		Planeta 44—Two Color	17 3/4 x 21 1/8 to 32 x 44		5/8"	36 5/8 x 44 1/8			45 5/8 x 45 1/4		
		Planeta 50—One Color	17 3/4 x 21 1/8 to 38 x 50		5/8"	40 9/16 x 49 1/8			51 3/16 x 50 1/8		
		Planeta 50—Two Color	17 3/4 x 21 1/8 to 38 x 50		5/8"	40 9/16 x 49 1/8			51 3/16 x 50 1/8		
		Planeta 50—Four Color	17 3/4 x 21 1/8 to 38 x 50		5/8"	40 9/16 x 49 1/8			51 3/16 x 50 1/8		
		Planeta 55—One Color	17 3/4 to 41 x 55		5/8"	44 1/2 x 55 1/8			54 x 56 11/16		
		Planeta 55—Two Color	17 3/4 to 41 x 55		5/8"	44 1/2 x 55 1/8			54 x 56 11/16		
		Planeta 55—Four Color	17 3/4 to 41 x 55		5/8"	44 1/2 x 55 1/8			54 x 56 11/16		
Milton Web—48" 4 or 8 Color Built to Customer's Specifications		Milton Web—24" 2-4 Color	17 3/4 x 24 1/2 or Rewind			24 5/8 x 10 1/8	0049" to .0118"	24 x 20	.0707"		
		Milton Web Offset 1-Color 2-Color 3-Color 4-Color 5-Color	17 3/4" cut-off x 24 1/4" maximum web width	16 7/8 x 24		19 1/8 x 24 1/2	.012"	.012"	20 1/8 x 24 1/2	.065"	.079"
Speed Range	Feeder	Feeder Capty.	Delivery	Delivery Capacity	Number and Sizes of Covered Inking Rollers	Number and Sizes of Covered Dampeners	Approximate Weight	Approximate Floor Space	Electrical Specifications		
7500	Speiss	28"	Built In	21"		Form 2.637" 20.055" 2.755" 29.740" Duct 3.031" 29.212"	8,600 lbs.	10'4"x5'2"	5.3 H.P.		
9000	Speiss	28"	Built In	28"				11'x8'10"	7.9 H.P.		
7500	Speiss	42"	High Pile	48"		Form 2.637" 44.881" 2.677" 45.432" Duct 2.992" 45.275"					
7500	Speiss	42"	High Pile	48"		Form 2.637" 44.881" 2.677" 45.432" Duct 2.992" 45.275"	71,000 lbs.	25'x12'3"	18 H.P.		
7500	Speiss	42"	High Pile	48"		Form 2.637" 44.881" 2.677" 45.432" Duct 2.992" 45.275"	23,600 lbs.	24'1"x11'6"	13.5 H.P.		
7500	Speiss	42"	High Pile	48"		Form 2.637" 44.881" 2.677" 45.432" Duct 2.992" 45.275"		24'1"x11'6"	18 H.P.		
7500	Speiss	42"	High Pile	48"		Form 2.637" 50.291" 2.677" 50.944" Duct 2.992" 50.787"	24,600 lbs.	24'1"x11'11"	13.5 H.P.		
7500	Speiss	42"	High Pile	48"		Form 2.637" 50.291" 2.677" 50.944" Duct 2.992" 50.787"	38,500 lbs.	26'7"x12'6"	20 H.P.		
6000	Speiss	42"	High Pile	48"		Form 2.637" 50.291" 2.677" 50.944" Duct 2.992" 50.787"		28'6"x14'6"	25 H.P.		
	Speiss	42"	High Pile	48"		Form 3.188" 56.495" 2.637" 57.480" Duct 3.070" 57.480"					
6500	Speiss	42"	High Pile			Form 3.188" 56.495" 2.637" 57.480" Duct 3.070" 57.480"	44,900 lbs.	26'7"x13'1"	20 H.P.		
6000	Speiss	42"	High Pile			Form 3.188" 56.495" 2.637" 57.480" Duct 3.070" 57.480"					
8000					Form 2.755" 24.251" 2.440" 24.251" Duct 2.047" 24.409"	Form 2.755" 24.960" 2.440" 24.960" Duct 2.047" 25.141"	6,000 lbs to 11,000 lbs.	15'5"x4'7" to 22'x4'7"	3.3 H.P. to 4.6 H.P.		
12,000	Roll	40" (unless otherwise specified)	Sheet or Roll		2 Form 2 Vibrator 1 Doctor 5 Idler 1 Fountain	2 col. 7,000 lbs. 3 col. 9,000 lbs. 4 col. 12,000 lbs. 5 col. 15,000 lbs.	2-col. 5'x15'5" 3-col. 5'x18'9" 4-col. 5'x21'11" 5-col. 5'x25'2"		2-col. 5 H.P. 3-col. 5 H.P. 4-col. 7 1/2 H.P. 5-col. 10 H.P.		

News

ABOUT THE TRADE

Latin American Post To Quayle

N. H. Quayle has been appointed Harris-Seybold Co's first special sales representative to Latin America, it was announced late last month. For the past several years Mr. Quayle has been with the company's international division at the general offices in Cleveland. He will work with Latin American graphic arts firms in Mexico, Central America and the Caribbean.



Flint Appoints Bodell

The Howard Flint Ink Co. announced early this month the appointment of Robert W. Bodell as eastern district manager. Other organizational changes announced were the appointments of N. C. Robinson as technical sales representative for the lithographic industry, and Edward J. Sullivan, as territory representative in Connecticut.

The eastern plant of the company, located in Paterson, N. J., specializes in lithographic, metal decorating and packaging inks. The firm's technical, development and service laboratories are under the direction of Fred Dankert, who has more than 35 years experience in the industry. The competence in the industry.

Litho Import Rates Upheld

Success in preventing many duty concessions on imported lithographed material recently was reported by the Lithographers National Association.

According to LNA, the government sustained the industry's strong

objections to proposed cuts in the duty rate on booklets printed lithographically or otherwise, labels and flaps, not including cigar bands, and ceramic decalomanias. The only tariff reductions applying to lithographed material were in the greeting card classification, which included tally cards, valentines, greeting cards, place cards and all other social and gift cards. The rate on greeting cards etc., was reduced from 22½ to 21 percent for 1956; to 20 percent in 1957 and to 19 percent in 1958.

Imports of lithographic merchandise in the first quarter of this year showed a slight increase in tonnage and value over imports bought during the similar 1955 period.

N. Y. Bids for Convention

International officers, committee chairmen, board members and all club presidents of the International Association of Printing House Craftsmen recently received invitations to hold the 1959 annual convention in New York. Messages were enclosed from Mayor Wagner, Governor Harriman, and Kendal Slade, president of the New York club.

Decision as to the 1959 site will be voted during the international convention proceedings next year. The official bid was made last month at this year's annual convention in Los Angeles.

Hugh Ross Adams, Jr., Dies

Hugh Ross Adams, Jr., 58, president of Roberts & Porter Inc., died at River Forest, Ill., Aug. 12.

Mr. Adams joined Roberts & Porter in 1928 as vice president. A graduate



Hugh Ross Adams, Jr.

of Northwestern University, he came to the company at a time when the concern was growing rapidly and it was largely through his efforts that branch offices were established.

Always interested in technical improvements in the lithographic industry, Mr. Adams saw to it that his company was one of the first supply houses to join the National Association of Photo-Lithographers when that group was organized in the early 1930's. He subsequently became one of the directors of LTF.

A native of Meridian, Miss., Mr. Adams is survived by his wife, Mary, a son, Hugh Ross Adams, III; a daughter, Mrs. Sarah Massell; three grandchildren; and a brother, Hall.

A Special Message to the Graphic Arts Industry

ILFORD INC., now fully operational in major printing centers from coast to coast, is prepared to serve the American Graphic Arts industry with a complete line of famous Ilford films and plates through regular sources of supply.

Four of the most popular Ilford Graphic Arts plates, each with an established reputation for superior craftsmanship, are available now for immediate delivery:

● G.71—Ilford Formalith Plate

Used to produce final screen negatives for photoengraving, photolithography and rotogravure. Gives maximum hardness of dots with any regular "lith" type developer.

● R.51 Plate

A medium speed panchromatic plate of high contrast and fine grain in which the emulsion is thin and physically hardened. Used for color separation, line and screen negatives where sharp dots are needed—for example, photoengraving.

● R.25—FP Special

A fine grain panchromatic plate, designed for making continuous tone separation negatives in photoengraving, photolithography and rotogravure.

● N.30 Plate

A non-color-sensitized plate for continuous tone negatives and positives, capable of rendering very accurate tones from highlights to dense shadows. Can also be supplied with a malt emulsion (N.30M) which facilitates retouching.

A new and complete 44-page Ilford Graphic Arts Catalog is being prepared and printed for your convenience. This book will contain detailed information on all Ilford Graphic Arts products. Watch this publication for the announcement, then reserve your copy of the catalog as quickly as possible. For further details on Ilford Graphic Arts materials, contact your regular source of supply, or write to the address below.

ILFORD INC., 37 West 65th Street, New York 23, N.Y.

Sommer Joins Rudisill & Co.

Donald E. Sommer has joined Rudisill and Co., Lancaster, Pa., as vice president. Mr. Sommer formerly was technical director of the Printing Industry of America. James Rudisill, who continues as president, announced that Mr. Sommer will assist in the expansion plans of the creative printing and lithographing company.



Blattenberger Named Keynoter

Keynote speaker at the meeting of the National Safety Council's printing and publishing section during the National Safety Congress in Chicago next month will be Raymond Blattenberger, Public Printer of the U.S.

Others on the program, as announced by the Safety Council, include Dr. Harry Levinson, director, division of industrial health, the Menninger Foundation; Dr. Hedwig Kuhn, of the Kuhn Clinic; Richard L. Siegal, vice president, industrial and public relations, Gardner Board & Carton Co.; and John Redpath, executive vice president, Chicago Carton Co.

New officers of the printing and publishing section also will be elected during the meeting, scheduled for Oct. 24-25 at Chicago's Conrad Hilton Hotel.

NYEPA Offers Litho Courses

Two of the evening educational courses of New York Employing Printers Association, Inc., which starts its 40th season the week of Oct. 15, are shaped expressly to interest key men and office workers in the lithographic field.

The course in Estimating Offset Lithography will be taught by John O. Collison, who has had 24 years experience in lithographic estimating, purchasing, and production. Mr. Collison is connected with Niagara Lithograph Co. He was formerly with American Lithographic Corp., Rode & Brand, and Stecher-Traung Lithographing Corp.

This course is offered primarily for those who have had practical experience in the lithographic field. Estimating actual jobs in black and white, and color, under individual

supervision, will feature each step of the course. Specialists in binding, mounting and finishing, and paper will lead discussions in some sessions.

The course in Elements of Offset Lithography will be taught by Frank Stockinger, Jr., president of Stockinger and Langbein Photo Litho Corp., who has had 31 years experience in mechanical and managerial branches of lithography.

Other courses to be given by the Association which are of interest to workers in lithography are Advertising Typography, Advertising Layout and Typographic Design, Cost Accounting for Printers and Lithographers, Elements of Printing and Printing Processes, Financial Man-

agement for Profit, Paper and Paper Making, Planning Production for Profit, Proofreading, Revising and Copyreading, and Selling Printing for Better Business.

Heintzemann on Miehle Board

George A. Heintzemann, president, Dexter Folder Co., Pearl River, N. Y., was elected a member of the board of directors of Miehle Printing Press & Mfg. Co., Chicago, on Aug. 15.

Mr. Heintzemann started with Dexter as a printing and advertising consultant. In 1926 he was elected a director. He was made vice president in 1930 and executive vice president in 1939. He has been president of Dexter since 1940.

We master
Lithographers
DEPEND
on
DUROFLEX...

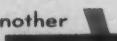


—Vulcan Duroflex Offset Blankets for perfect reproduction every time on the most difficult jobs.

Stretch proof Duroflex provides even gauge, utmost resilience and much greater mileage. No swelling or tackiness assures finest reproductions.

Insist on the genuine Duroflex Offset Blanket... Specify Vulcan — and be sure!

Call your Vulcan Duroflex representative.
He'll be glad to discuss your problems.

Another  **REEVES**
VULCAN
RUBBER PRODUCT

REEVES BROTHERS INC.
VULCAN RUBBER PRODUCTS DIVISION

54 Worth Street • New York 13, N. Y.

We have passed our 130th year in the Roller Industry, and are entering our 131st year. Since 1826 the name of "Bingham" has meant prompt and efficient service to the Graphic Arts Industry twenty-four hours a day, seven days a week. If a real emergency arises contact our representative in your territory, and we will do our utmost to keep your presses running.

We have developed several satisfactory types of Rubber and Neoprene Rollers for use on Litho Presses, and we feel we have the best there is to offer at the present time. However, we are developing an entirely new type of Roller for the Offset Presses. This Roller is known as the WILPRINT ROLLER® and is ready for use on the smaller type presses; some changes in the processes are necessary for larger rollers. Within a comparatively short time they will be manufactured at all of our branch factories and also stocked in our service branches at Springfield, Worcester, and Providence.

**Our new Representative for the Springfield Territory is Mr. Alfred R. Sicard,
87 St. James Avenue, Holyoke, Mass.**

We also have all the necessary equipment for manufacturing your Dampener Rollers at all of our branch factories. If you are located in any one of these Cities your old rollers will be picked up, recovered and returned without any cost for this service.

At each of our factories listed below we have a complete equipment for all types of Rollers and supplies. Contact us and you will receive immediate service.

GOOD ROLLERS CREATE GOOD IMPRESSIONS

BINGHAM BROTHERS COMPANY

**Main Office and Largest Factory
406 PEARL ST., NEW YORK 38, N. Y.**

PHILADELPHIA
1315 Race Street

CAMBRIDGE
23 Harvard Street

SPRINGFIELD
162 Taylor Street

BALTIMORE
1011 curtain Avenue

JERSEY CITY
257 Brunswick Street

RICHMOND
614 E. Main Street

ROCHESTER
980 Hudson Avenue

GARWOOD
648 South Avenue

NEW HAVEN
8 Center Street



*The only 130-year-old firm
of Roller Makers in the world.*



*Member of the only
100-year-old club in the world.*



At the dedication ceremonies of the new Washington, D. C., building of Printing Industry of America, J. R. Jackman, *left photo*, PIA president, is about to introduce Elmer G. Voigt, chairman of PIA Properties Management Committee. *Center*

photo, l. to r., Mr. Voigt, John Walton, architect; John M. Wolff, of Western Printing & Lithographing Co.; and Elmer Down, contractor. *Right photo*, Mr. Voigt and the Hon. Raymond Blattenberger, who delivered the dedication address.

Printing Industry of America Dedicates New Headquarters

By *Mike Geary*
Washington Correspondent

THE Printing Industry of America, Inc., officially opened the doors of its new headquarters building in the nation's capital with a formal ceremony and dedication on Aug. 9. Elmer G. Voigt, chairman of the PIA Properties Management Committee and chairman of the board, Western Printing and Lithographing Co., Racine, Wis., placed the cornerstone in the new red brick, "Williamsburg Colonial" type building at 5728 Connecticut Ave., in suburban Chevy Chase, Washington, D. C. In his dedication comments, Mr. Voigt paid tribute to the industry and to those whose constant effort made possible the "fulfillment of this dream."

The Hon. Raymond Blattenberger, Public Printer of the U. S., delivered the dedicatory address in which he praised the printing industry representatives for their far-sightedness and untiring efforts to erect a national headquarters. Mr. Blattenberger described the building as a "symbol of faith, hope and wisdom" and hailed the dedication as "a proud moment for all of us who love the printing

industry, because there comes into reality today a dream that was close to the hearts of the many men who helped to build our national organization."

The dedication brought to a close a four-day program of events beginning Aug. 6, during which time executive secretaries and managers of 62 local and state associations affiliated with PIA, conducted a formal inspection of the new facilities and held discussions on association problems.

The entire program was under the general direction of J. R. Jackman, The Rumford Press, Concord, N. H., PIA president. Local arrangements were directed by Herbert G. Pillen of Mercury Press, Washington, D. C. and chairman of the Public Relations Committee for The Graphic Arts Association of Washington, D. C. Bernard J. Taymans is General Manager of the Printing Industry of America and supervised the organization's building program.

The Research and Engineering Council of the Graphic Arts Industry, Inc., under the direction of Robert

E. Rossell, also will maintain offices in the new building. Miss Birtie A. Johnson, director, Member Relations, PIA, played hostess to the many letterpress, lithographic, gravure and allied industrial representatives and members of the press, visiting at the dedication ceremonies. PIA is now making plans for the 70th Annual Convention of the Association, which will be held in Los Angeles, Oct. 30-Nov. 2.

PIA originally was organized as the United Typothetae of America in 1887. For over a half-century, beginning as an employers' organization, it developed into one of the leading trade organizations, not only of the printing industry, but of industry in general.

In 1945 the UTA merged with Printers' National Association and the local printing associations which formed the war-time Joint Committee on Government Relations, and became Printing Industry of America, Inc. PIA has extended its membership greatly, running well over 5,000 printing plants and 62 affiliated associations.

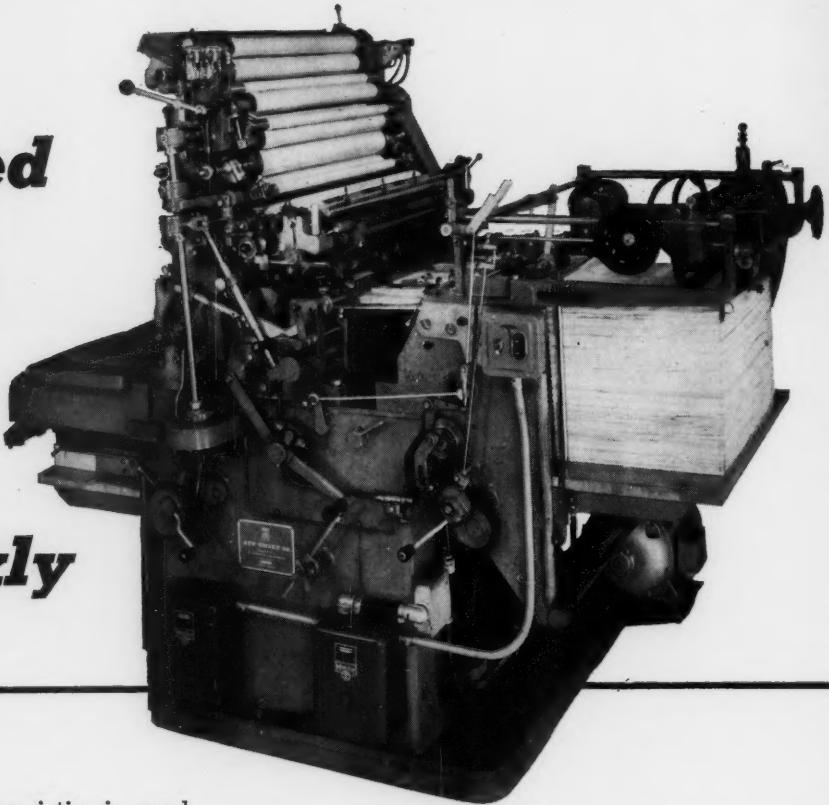
Here's why the Chief 24

proved

itself

so

quickly



Consider the wide variation in speed, size and sheet thickness handled by the Chief 24, as indicated by the specifications shown here, and you'll quickly see how this tremendous versatility has established the Chief 24's reputation as the outstanding all-round offset press in its size range.

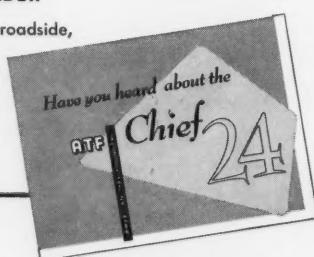
But versatility is only part of the story on the Chief 24. Every possible provision has been made in this press for simplicity of operation and maintenance to assure a steady high and dependable rate of daily output. All press controls are within easy reach of the pressman for efficient, tireless operation...all controls afford virtually microscopic adjustment for smooth feeding, hairline register and uniform flow of ink and water.

Why not look into the Chief 24 as a means of supplementing your present equipment...as a means of expanding your business?

FREE SPECIFICATION FOLDER

This 17 $\frac{3}{4}$ " x 24 $\frac{1}{2}$ " four-color broadside, a sample of standard production on the ATF Chief 24, is yours for the asking. Write for it today or contact your ATF Sales Representative.

ATF



Better...more profitable printing from the most complete line of equipment

SPECIFICATIONS

Sheet size 8 $\frac{1}{2}$ " x 11" to 17 $\frac{3}{4}$ " x 24 $\frac{1}{2}$ "

Printing area 17 $\frac{3}{8}$ " x 24 $\frac{3}{8}$ " maximum (except trip-off sheet)

Speed range 2700 to 6000 IPH

Stock range Onion skin to 6-ply cardboard

Floor space (with extreme extensions and largest motor) 56" x 77"

Adjust-O-Matic Stepless Speed Control

Automatic Wash-up Device

Stream Feed

Ask your ATF salesman for complete specifications or write for literature today. American Type Founders, 200 Elmora Avenue, Elizabeth, N. J.

MASA Inspects Sales At Meeting

Mail Advertising Service Association members, producers of more than 60 percent of the nation's direct mail advertising done on a professional basis, met in Chicago Aug. 24-28 to discuss ways of increasing direct mail sales. The improvement of quality and effectiveness of direct mail sales also was discussed by the 600 shop owners who attended the 35th annual meeting.

EGA Combines Offices

Eastern Graphic Arts Supply Co., Inc. has moved from 48 Perry St., Closter, N. J., and 254 West 31st St., New York, to a combined office and distribution center at 509 W. 56th St., New York. This was the firm's third move in 10 years.

Plant Tours Held At Miehle

Miehle Printing Press and Manufacturing Co. recently extended an invitation to members of the graphic arts industry visiting Chicago to tour its plant. The "open house" at Miehle includes a trip through the factory to see the manufacture of presses, new equipment in operation, and presses in operation in many Chicago plants.

A working display at Miehle of the new Eastman three-color process was shown for three weeks, beginning Aug. 13.

MLA-ALA Sponsor LTF Forum

Members of the staff of the Lithographic Technical Foundation will present a technical forum specially designed for New York and eastern conditions Nov. 30-Dec. 1, at New York's Manhattan Center.

The MLA-ALA forum committee, made up of representatives of the Metropolitan Lithographers Association and of Local No. 1, Amalgamated Lithographers of America, sponsors of the forum, announced details last month.

The Nov. 30 sessions will begin at 5 p.m. and end at 9:15 p.m. and will be presented by closed circuit, large screen television. The Dec. 1 program will be handled by color movies and slide films, and will cover the

technical developments not suited to black and white TV presentation.

Seven men from the LTF Chicago research laboratory will present the program, actual demonstrations of lithographic techniques and methods developed by research and plant experience.

Cooperating with the two sponsors are the Lithographers National Association, the National Association of Photo-Lithographers and the Young Lithographers Association of New

York; also the Litho Clubs of Baltimore, Boston, Buffalo, Connecticut Valley, New York, Philadelphia, Rochester and Washington, D. C.

Burget Named Plant Manager

Russ Burget has been appointed manager of the Oklahoma City roller factory of Sam'l Bingham's Son Mfg. Co. Mr. Burget has been associated with the company for more than 20 years at branch factories in Houston, Dallas, and Kansas City.

**Up-to-date lithographers
almost everywhere***
use the



*

For names of users in your vicinity, just write to Jomac Inc., Dept. L-1, Philadelphia 38, Pa.

JOMAC



a salute to the
GRAND AWARD WINNERS
of the Plover Bond Letterhead Competition

LETTERHEAD FOR
David B. McCosker
Los Angeles, California

PRODUCED BY
Creative Printing
West Los Angeles, California
Robert Trogman

PLOVER BOND FURNISHED BY
Zellerbach Paper Company
Los Angeles, California
Charles S. Berney

LETTERHEAD FOR
Overly Manufacturing Company
Los Angeles, California

PRODUCED BY
Production Press
Los Angeles, California
Nat Tanenbaum

PLOVER BOND FURNISHED BY
Zellerbach Paper Company
Los Angeles, California
Vic Torrance

LETTERHEAD FOR
Olivetti Corp. of America
New York

PRODUCED BY
Graphic Offset, Inc.
Milwaukee, Wisconsin
William Ardern

PLOVER BOND FURNISHED BY
Dwight Brothers Paper Company
Milwaukee, Wisconsin
Jerry Tetzlaff

LETTERHEAD FOR
Frank Gianninoto & Associates
New York

PRODUCED BY
Hasbrouck, Thistle & Co., Inc.
New York
John Burlinson

PLOVER BOND FURNISHED BY
Ris Paper Company
New York
Harlan Drew

LETTERHEAD FOR
Mojud Hosiery
New York

PRODUCED BY
Manhattan Stationery Co.
New York
Sam Beck

PLOVER BOND FURNISHED BY
Berman Paper Corp.
New York
Myron P. Berman

LETTERHEAD FOR
Avon Products, Inc.
Kansas City, Missouri

PRODUCED BY
Commercial Lithographing Co.
Kansas City, Missouri
John Pfeiffer

PLOVER BOND FURNISHED BY
Wertgame Paper Company
Kansas City, Missouri
Daniel Franklin

LETTERHEAD FOR
American Book—
Stratford Press, Inc.
New York

PRODUCED BY
Ardco Service
New York
Sol. Katz

PLOVER BOND FURNISHED BY
Royal Paper Corp.
New York
Samuel Landau

LETTERHEAD FOR
Ruth Lerner—Georgia Gray
New York

PRODUCED BY
R. E. Ferguson Company
New York
John DeSantis

PLOVER BOND FURNISHED BY
Majestic Paper Corporation
New York
Melvin W. Yobs

LETTERHEAD FOR
Norman A. Coleman
New Philadelphia, Ohio

PRODUCED BY
Tucker Printing Company
New Philadelphia, Ohio
J. F. Tucker

PLOVER BOND FURNISHED BY
Alling & Cory Company
Cleveland, Ohio
Morry Droney

LETTERHEAD FOR
Joe Pearson
Chicago, Illinois

PRODUCED BY
Fred Arnold Printing Company
Lincoln, Nebraska
Betty Arnold

PLOVER BOND FURNISHED BY
Western Newspaper Union
Lincoln, Nebraska
Max Pennington

LETTERHEAD FOR
Ace Offset Printing Company, Inc.
Los Angeles, California

PRODUCED BY
Ace Offset Printing Company, Inc.
Los Angeles, California
Martin I. Bassitt

PLOVER BOND FURNISHED BY
Zellerbach Paper Company
Los Angeles, California
Lee Fisher

LETTERHEAD FOR
The Cone Company
Seattle, Washington

PRODUCED BY
The Cone Company
Seattle, Washington
Milton G. Weis

PLOVER BOND FURNISHED BY
Zellerbach Paper Company
Seattle, Washington
Samuel R. Boren

Congratulations to you Grand Award and Honorable Mention winners . . . and our sincere thanks to all who entered and contributed so much to the success of the Plover Bond Letterhead Competition.

Judges: *Howard A. Guernsey*, Whitaker Guernsey Studio, Inc., Chicago—
R. Hunter Middleton, Ludlow Typograph Co., Chicago—*Dr. Albert Sutton*, Medill School of Journalism, Northwestern University, Evanston.

SPONSORED BY WHITING-PLOVER PAPER COMPANY STEVENS POINT, WISCONSIN



H. R. Freund Dies Suddenly

Herman R. Freund, 70, former vice president and chief engineer of Intertype Corp., Brooklyn, died of a heart attack Aug. 18 at Doylestown, Pa., while returning to his Brooklyn home after vacationing.

Mr. Freund was associated with Intertype for 44 years, first as supervisor in charge of all typographic work, and later as chief engineer. Subsequently he was appointed vice president in charge of research and development, a post he held until he retired recently. At his death, he served with the corporation on a consulting basis.

In addition to his development of the Fotosetter photographic line composing machine, Mr. Freund also designed many of the type faces used by newspapers, including Ideal News and Regal, as well as many other original faces for language composition, such as the Lambrakis Greek series.

Mr. Freund is survived by his widow, Juliet; a son, Dr. H. Robert Freund; a brother, Rudolph; a sister, Mrs. Laura Hurter, and three other sisters living in Germany; and five grandchildren.

Mack Assocs. Name Distributor

Norman A. Mack Associates, Inc., Stamford, Conn., announced last month the firm has concluded negotiations with Van Son Holland Ink Corp. of America, Mineola, N. Y., to distribute all Mack Associates products, including Dis-Cover. Arrangements also were made allowing the Holland Co. to manufacture a chemi-

cally impregnated molleton under the trademark Impreg Sleeve.

Mack Associates continue to operate as manufacturers only, with the main manufacturing plant in Connecticut. Norman A. Mack, president of the firm bearing his name, has joined Holland Ink as director of research and development and will have his headquarters at the Mineola laboratory.

All sales activities now are being conducted at Holland's Mineola office

and correspondence should be addressed to Holland Inks, 92 Union St., Mineola, N. Y.

Miehle Names Hirst to Staff

Robert Hirst recently joined Miehle Printing Press & Mfg. Co. as a sales representative. After completing training in Chicago, he was assigned to the Los Angeles office as territory representative. Mr. Hirst has served the industry in production and printing sales work.

One Call for all your Photo needs

First source of Supply for the GRAPHIC ARTS for over 36 years

NORMAN-WILLETS

GRAPHIC SUPPLY COMPANY

316 W. WASHINGTON ST
CHICAGO 6, ILL.
Phone
RANDolph 6-8300

It's faster and more convenient to use NORMAN-WILLETS' "One Call" service when you want photo equipment and supplies. We maintain a complete stock of nationally known brands from which we can fill your most exacting requirements. You can depend on courteous and prompt service whether your order calls for one item or several, large or small . . . "One Call" gets them all! Call NORMAN-WILLETS today and place an order and see for yourself.

Changeover To Offset Completed

A changeover from letterpress to offset production has been completed by Mike Roberts Color Productions of Berkeley, Cal. Effected over the past three years, the changeover has involved the conversion of several thousand color card views from copper plates to offset positives, a complete changeover in press equipment, rebuilding of the plastic-coating plant, and radical changes in the preparation department.

Mike Roberts Color Productions recently has taken over the photoengraving and lithographic color-separation business of its affiliated Color Plates, and is now absorbing its other affiliate, Color Sales, a corporation established in 1954 for the sale of process-color printing. The combined organization is expected to top a million dollars in sales next year.

Mike Roberts will continue as president of the unified operation,

James J. McClay is executive vice president and treasurer, and B. Franklin Zercher, secretary, in charge of all production.

TAPPI Plans May Conference

"The Manufacturing and Processing of Coated Paper and Paperboard" will be the theme for the eighth annual coating conference sponsored by the Technical Association of the Pulp and Paper Industry, scheduled to be held next May 20-23 in Milwaukee.

Technical papers on this theme and a number on the coating field in general will be presented. The conference is to include visits to printing and converting plants and paper and coating mills in the Appleton, Wis., area.

Jack E. Wilber, St. Regis Paper Co., is general chairman; Frank Kaulakis, Consolidated Water Power & Paper Co., program chairman; Clark Wakefield, Titanium Pigment Corp., local arrangements chairman; and Louis E. Georgevits, The Borden Co., chemical division, publicity chairman.

Persons desiring to present a paper should contact one of the conference officials.

Brooks Is New Midwest Mgr.

Gilbert L. Brooks, recent manager of Stecher-Traung's Minneapolis sales office, has been appointed manager of the firm's midwest sales district, with headquarters in Chicago.

Announcement of the appointment was made in Rochester, N.Y., by W. Bayard McCoy, vice president in charge of sales. Mr. Brooks joined the lithographic firm 15 years ago after prior sales experience in the paperbox industry.

Foundation Grants Scholarship

Western Foundation, established by Western Printing & Lithographing Co., has awarded a \$3,200 scholarship to Miss Ann M. Stuhlman, daughter of Mr. and Mrs. Conrad F. Stuhlman, Pasadena Hills, Mo. Mr. Stuhlman is sales manager of the firm's southwestern division.



...with a...

HESS & BARKER

Web-Fed • Perfecting

OFFSET PRESS

- Print 1—4 colors per side, simultaneously
- Run up to 20,000 impressions per hour
- Use zinc, aluminum or any other type of offset plates
- Reduce upkeep and maintenance costs

Here's the press that's making fast friends among commercial offset printers. Install one 6' x 6' x 9' unit; then add up to three more units for greater versatility and productivity. Before you buy ANY new offset press, get all the details on a HESS & BARKER. Send for them—TODAY!



NSC Program For Printing

The printing and publishing section of the National Safety Council now is engaged in an accident program survey. The purpose of the inventory is to determine prevailing safety procedures, new ideas, and a cross-section opinion of the members in the section.

A questionnaire has been mailed to members which covers such subjects as physical environment, accident investigation, medical and first-aid programs, supervision policy, safety committees, and employe selection, placement, job instruction and education.

Tips On Litho Production Given

Close cooperation among cameraman, plate maker, stripper and pressman is a primary requisite for production of top grade black-and-white lithographic reproduction, Kenneth L. Bailey, Anasco graphic arts representative, emphasized in a recent talk to members of the East Bay Club of Printing House Craftsmen held at Oakland, Calif., Mr. Bailey stressed the need for both personal and technical cooperation.

"Some pressmen can print a 10 percent dot in the shadow area and keep it open, while other pressmen may require a 15 percent dot. One way to insure good constant reproduction of halftones is for the camera department to shoot three or four gray scales varying each 5 percent in the highlights and shadows, then let the plate department decide on which one makes the best plates, and in turn the pressman decides on which one seems the best on the press. The halftones will vary from plant to plant for various reasons such as stiffness of ink, condition of press, type of plate, and paper."

Other tips on obtaining high quality: For grained plates it is necessary to have a larger dot in both the highlights and shadows than for non-grained plates. Although both types have their place in a modern lithography operation, non-grained plates are preferable for smooth printing halftones. Coated papers require larger highlight and

shadow dots than soft finish papers. The peg register system for making multiple burns of several negatives onto one positive assures accurate register and eliminates much opaquing.

Mr. Bailey exhibited to the Craftsmen a diagram for a good but relatively inexpensive light system involving a G.E. single filament 30 volt bulb, wired through a transformer, which gives a pinpoint light source that insures no undercutting.

Glass Wall For N. Y. School

The \$6 million New York School of Printing, now under construction in New York City, will have the entire seven-story facade of its shop portions built from green-tinted glass blocks. The building will house the free vocational school which the N.Y. Board of Education operates in conjunction with the printing industry. The school will provide the city with complete modern graphic arts training facilities.

**Pressmen use
COLOR
with confidence
when they clean
ROLLERS & BLANKETS
with**



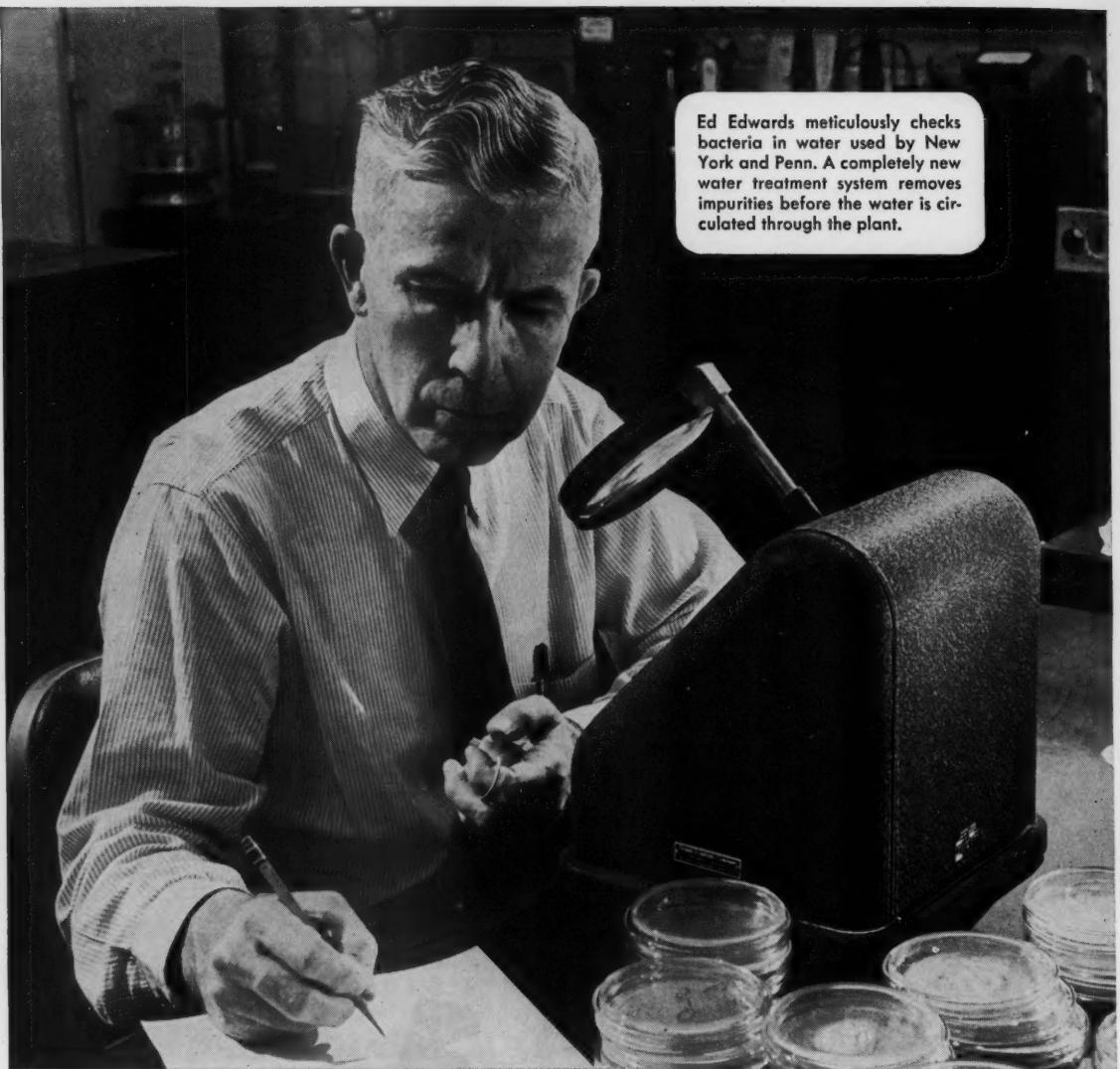
ANCHOR'S WASH R228
ANCHOR CHEMICAL CO., INC.

GO FROM DARK TO LIGHT FASTER
and condition the rubber in 1 STEP with
R228 containing RESILIUM
(Anchor's exclusive formula)

Try it — order today from your dealer • FREE: Write Dept. M
for "Modern Techniques in the Care of All Rollers and Blankets"

ANCHOR CHEMICAL CO., INC.
SOLUTIONS FOR GRAPHIC ARTS PROBLEMS
B29 BERGEN ST BROOKLYN 38, N.Y.





Ed Edwards meticulously checks bacteria in water used by New York and Penn. A completely new water treatment system removes impurities before the water is circulated through the plant.

HIS MICROBE HUNT MAKES PAPER BETTER

Ed Edwards, Water Engineer at New York and Penn's Lock Haven, Pa., mills, isn't on the brink of discovering a new miracle drug . . . but he is the man who helps make sure the paper you buy is clean and free of impurities!

Hundreds of gallons of water go into the making of every pound of paper. And it's Ed Edwards' job to perform mass murder on that water's bacteria population. He wages the same battle against common dirt, too.

Ed Edwards—and men like him—supervise the purification of enough water at each

New York and Penn mill to supply a large city. It's a big job . . . yet it's only part of New York and Penn's quality control over every ingredient, from wood chips and pulp to chemicals and fillers.

If you'd like to know some of the reasons why New York and Penn papers print better, look better, and feel better, we'd be pleased to send you the name of our nearest distributor, who can supply you with the samples. New York & Pennsylvania Co., 230 Park Ave., New York 17, New York.

New York and Penn *Pulp and Paper Manufacturers*

Super • English Finish • Eggshell • English Finish Litho • Offset • Music • Bond • Tablet • Duplicator • Mimeograph • Drawing

Foreign Posters on Display

R. R. Donnelley & Sons Co.'s Lakeside Press galleries in Chicago are gay this month with the brilliant colors of posters designed chiefly in European countries which excel in this form of advertising art. Some 120 superb examples make up the show, which was assembled by *Gebrauchsgraphik* of Switzerland, from that country, France, Germany, Italy, Sweden, England, Denmark, Holland and Poland with a few, also, from Israel and Japan.

Subjects range from silks to steel, confections to cosmetics, and one of the most interesting is a Polish poster advertising a motion picture based on Dickens' *Pickwick Papers*. The widest possible variety of art styles is evident and production was by all printing processes, including lithography.

The poster show is one of a continuing series of exhibitions hung over the years in the Donnelley galleries and usually changed about every three months. Many are arranged as an institutional service to acquaint printers with outstanding examples of the printing art in all its varied forms both at home and abroad. The present show is scheduled to remain on view until Nov. 1.

John T. Harrison Dies Suddenly

John T. Harrison, 62, of Northwest Paper Co., Cloquet, Minn., died suddenly July 12 of a heart attack in Worland, Wyo. He had been associated with Northwest for 24 years, most recently in the promotion department. Mr. Harrison's home was in Minneapolis. He is survived by his wife, Elizabeth, and a son, Lee.

Kenilworth Affiliates Divisions

The Kenilworth Press, Inc., New York, recently changed the structure of the corporation by making affiliates of its four divisions. Allan Silverstein, president, and Reginald Fawcett, vice president, acquired Kenilworth Corp., offset business, and Kent, Inc., offset platemaking concern. At the same time Clarence Baylis, for 20 years a foreman with Typesetters, Inc., became owner of

that business and also Advertising Composition, Inc. All four enterprises are functioning as affiliates and are located together with Kenilworth Press, Inc.

St. Louis GAA Elects Brown

Leonard B. Brown, A. R. Fleming Printing Co., has been elected treasurer of the Graphic Arts Association of St. Louis. The directors of the association also approved the appointment of Frank J. Merrill, president of The Geo. D. Barnard Co., to fill the unexpired term on the board of directors created by the resignation of George B. Gannett. Mr. Gannett also had been the treasurer of the association for many years.

IGAEA Elects Kennedy

Charles E. Kennedy, executive director, Southern School of Printing, Nashville, Tenn., was elected the new president of the International Graphic Arts Education Association, at the Association's convention last month at the University of California, Santa Barbara College. Mr. Kennedy succeeds Otis H. Chidister, director of graphic arts at Tucson High School, Tucson, Ariz.



Cramer Plate Names Novak

Erwin J. Novak has been appointed to the Midwestern sales division of G. Cramer Dry Plate Co., St. Louis. He will service the metropolitan Chicago area as well as Ohio.

Brand New!

ROGERSOL

3 for 1

COPPER WASH

Now you can CLEAN your rubber rollers and COPPER COAT your steel rollers in one operation!

Cleans

RUBBER &

COMPOSITION

ROLLERS

Cleans

ALL Rollers

Copper Coats

STEEL

ROLLERS

Novel NEW package

eliminates waste!

ONE STEP — use with your present solvent. Copper coat as you wash out varnishes, gums, acids and pigments . . . 3 for 1 does not affect plate. Go quickly from dark to pastel colors. Conditions rollers for long life and better reproduction. Improves ink receptivity; better water control; ends stripping. Prevents oxidation. High flash — non-toxic.

Write today for your FREE sample

HARRY H. ROGERS CO., Inc.

5331 S. Cicero Ave. • Chicago 32, Ill. • RELIANCE 5-5100

Howell-North Enlarges Offset

The Howell-North Press, of Berkeley, Cal., is enlarging its recently established offset department with the installation of a Webendorfer Big Chief press, in addition to the Little Chief installed several months ago. A new Robertson camera and complete platemaking equipment also have been installed, and an Anderson step-and-repeat machine is on order. The firm now is a well-rounded combination printing plant, according to owners Robert Howell and Mor-

gan North, with complete pamphlet and case binding departments.

A new two-story building to be constructed next summer will contain about 30,000 sq. ft. of floor space.

Scripture Press Moves

Scripture Press, Chicago lithographers, announced that, effective Oct. 1, the firm will be located at 1825 College Ave., Wheaton, Ill. The company now is at 434 S. Wabash Ave., Chicago.



Wesel 25 Camera

A Low-Priced Camera With Many Outstanding Features

The Wesel 25 is a precision piece of equipment with built-in simplicity. It produces superb negatives! All camera operations . . . film loading, automatic timing, automatic sizing and focusing are done from one position at the rear of the camera. Designed for line and Autoscreen offset and photoscreen negatives. Size of back: 25" x 25". Tilting copy holder is 30" x 40". Entire unit is mounted on 3-point vibration-absorbing mounts. Investigate the savings that ownership of a Wesel 25 affords you.

Write for descriptive literature today!

WESEL MANUFACTURING CO.

1141 N. WASHINGTON AVENUE

SCRANTON, PA.



- ★ Lower First Cost Price
- ★ Complete Package Unit
- ★ Saves Floor Space
- ★ LIFETIME Ball Bearings on All Critical Parts
- ★ LIFETIME Counter Numbers for AUTO-SIZE-FOCUS
- ★ LIFETIME Lathe-Like Monorail Design

Western Retirement Plan Grows

With 169 employees of Western Printing & Lithographing Co. becoming eligible this summer for the company financed retirement program, the total under the plan has risen to 1370.

Every Western employee at the age of 30, who has recorded five years of continuous employment, is eligible for \$5,000 in life insurance and a minimum of \$50 a month retirement income at the age of 65.

More than 100 former Western employees now are either on retirement or eligible for retirement under this program. Policies now in effect for all participants in the plan will have at maturity an aggregate value for providing retirement benefits of more than \$14,000,000.

Roux Elected Vice President

John W. Roux recently was elected vice president of Colyer-Roux Printing Co., Newark. Mr. Roux joined the firm late in 1955 following his discharge from the Army where he did methods analysis work for the Signal Corps Publications Agency printing plant. He is a member of the New Jersey chapter of the National Industrial Advertising Association and the Master Printers Association of Newark.

Lamb Named To Sales Post

Nelson P. Lamb, former purchasing agent for the Cincinnati Lithographing Co., has been appointed assistant sales manager of the G. C. Dom Supply Co., Cincinnati. Mr. Lamb also had been employed in offset work at Tristate Offset Co. and Capital Printing Co., both of Cincinnati.

Gill Is GAA Convention Head

Robert Gill, president of Gill Printing & Stationery Co., Mobile, Ala., has been named general chairman for the 36th annual convention of the Southern Graphic Arts Association. The event, to take place simultaneously with the 18th annual exhibit of Southern printing, will be held April 4-6 in Mobile.

Connell Named To Litho Sales

The appointment of Clyde Connell as a Milprint sales representative specializing in lithography was announced recently by Bert Heftner, vice president and general sales manager of the Milwaukee lithography and packaging company. Mr. Connell will work out of the company's home office.

AnSCO Appoints Con Donovan

Con Donovan, Jr. has been appointed manager of advertising and promotion for ANSCO, the photographic manufacturing division of General Aniline & Film Corp. Mr. Donovan formerly was associated with Fawcett Publications, *American Legion Magazine*, and Dell Publishing Co.

In his new position Mr. Donovan will be responsible for coordinating all of Anasco's advertising and promotion activities. Winthrop Davenport continues as manager of Anasco's advertising department.

ATF Names Nelson District Mgr.

Carl A. Nelson, of American Type Founders, has been named manager of the firm's New England district office in Boston. Mr. Nelson has been an ATF salesman in the Boston area for the past 11 years.

Prior to joining ATF, Mr. Nelson spent eight years as plant superintendent of Wellesley Press, Wellesley, Mass. He is a past president of the Boston Club of Printing House Craftsmen.

Unions Help Restraining Action

The California Conference of Typographical Unions voted \$250 toward expenses of the taxpayers' suit to restrain Los Angeles County from printing the Great Register from cold type, at its July meeting held at San Mateo. Joseph D. Baird, president of the San Francisco Typographical Union, was elected president of the Conference for the coming year, and Monterey was chosen as the location of its next quarterly meeting, to be held in October.

only **ENCO** offers
a PRE-SENSITIZED OFFSET PLATE
for **EVERY NEED!**
and **MOST EVERY PRESS**

ENCO the NEW **Pacemaster Economy**
PRE-SENSITIZED PLATES

The newest Enco Pre-sensitized plate. Developed for speed and economy. A negative working plate specially controlled acetate laminated to paper. Visible image and fastest exposure and processing, of any plate made. Available in most press sizes.

ENCO **NEGATIVE-WORKING ALUMINUM PRE-SENSITIZED PLATES**

Made for the critical lithographer. A quality plate for faithful reproduction of line and halftone work. Fine grained surface, fast one-step development. Unaffected by temperature or humidity. Heavy, scratch resistant aluminum. Easy to handle on the press.

ENCO **POSITIVE-WORKING ALUMINUM PRE-SENSITIZED PLATES**

The FIRST pre-sensitized positive working plate in America. For use wherever positive originals, film or transparencies are available, the economical alternate to deep etch. Gives positive image from positive original. Fine grained surface, visible image after exposure, unaffected by humidity. A fast, easy-to-process plate that's easy to handle on the press.

All Enco Pre-sensitized plates are available in sizes to fit most presses.

Enco "LS" Developer for aluminum plates, and the new 3RP Image Remover (Paste) are the newest aids for faster, better reproduction.

® by the originators of pre-sensitized plates.

azoplate
corporation
SUMMIT, NEW JERSEY
ENGELHARD INDUSTRIES
Producers of Paper laminated acetate
and aluminum pre-sensitized
offset plates.

azoplate CORPORATION SUMMIT, NEW JERSEY
Gentlemen: Please send us complete
information on ENCO pre-sensitized
plates.

For _____ size press.
NAME _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____

Wisconsin GAA Plans "March of Progress" Dec. 13-15



Pictured planning the Graphic Arts Association of Wisconsin's "March of Progress" are *l. to r.*: Leora Lee Daehling, GAA public relations director; Art Johnson, GAA executive director; James Sen-

The Graphic Arts Association of Wisconsin will celebrate its 70th anniversary with a "March of Progress" Exposition and Conference at Milwaukee Auditorium, Dec. 13-15. The three-day program will feature an equipment and materials exhibit, a management conference and dinner, and litho and letterpress clinics.

Booths will be set up in 10 classifications and will include the following subjects: offset plates, camera and supplies (including presensitized plates); offset press, accessory press and materials handling equipment, and paper and ink.

At the litho clinic, Dec. 15, staff

senbrenner, Sensenbrenner Paper Co.; Richard Snyder, Crammer-Krasseit Advertising Co.; Richard Leberman, Fakler Printing Co., general chairman; and Howard Moebius, Moebius Printing Co.

members of the Lithographic Technical Foundation will demonstrate and discuss the latest techniques of lithographic production, with special emphasis on halftone photography, color and color reproduction, subjects not covered previously in technical forums.

A program directory is being planned to tie-in the three-day activities, giving exhibitors an opportunity to describe their products, listing graphic arts facilities in the area, and including articles of interest to the industry. The directory also will incorporate the GAA annual report and descriptions of associated services.

Engravers Set Oct. 8-10 Date

Robert Vanderkloot, president, Detroit Colotype Co., will present "Candid Views of a Letterpress—Offset Man" at the 60th annual convention and machinery exhibition of the American Photoengravers Association, Oct. 8-10, at Detroit's Hotel Statler.

In addition to technical discussions and panels, the three-day session will emphasize the business end of photoengraving, concentrating on sales and cost accounting. Representatives of the following companies are scheduled to speak: Philip A. Hunt Co., Palisades Park, N. J.; Kemart Corp., San Francisco; Radio Corporation of America, Princeton, N. J.; Robertson

Photo-Mechanix, Inc., Chicago; Ansco, Binghamton, N. Y.; Eastman Kodak Co., Rochester, N. Y.; and the Dow Chemical Co., Midland, Mich.

New Map by Rand McNally

A new "first" in map making is claimed by Rand McNally & Co., Chicago printing and publishing firm, for a unique hunting, fishing and outdoor sports map, prepared for a Cody, Wyo. oil company. Charts and illustrations indicate the best areas for all types of game fish, upland game birds, migratory water fowl and big game, in six western states. Six different maps have been prepared, one for each of the six states. Shown on one side is the overall sports picture

for the entire area, while the reverse carries individual state road maps. The map, which took six months to produce, was prepared in cooperation with fish and game commissions of the six states.

As one more feature of Rand McNally's Centennial observance this year the company has issued a 100-page hardbound book containing speeches made by printers, educators, financial and civic leaders and others who participated in a birthday luncheon in Chicago last January.

III. GAA Plans Convention

In response to requests by its members, the Graphic Arts Association of Illinois has launched plans for a statewide convention of Illinois printers early in 1957. On the program, in addition to the usual dinner and short business session, will be panel, open forum and workshop sessions at which the feature subject, as requested by members, will be accounting and cost control. Technical developments in presses, papers, and inks will be covered. Labor and public relations for printers also will be discussed, it was announced by Frank J. Bagamery, Jr., association secretary manager.

Mills Expands Litho Dept.

Charles P. Mills & Son, Philadelphia photographic and lithographic firm, recently completed an addition to its plant. All lithographic work done by the firm is now produced at a new studio in a separate section of the company's building. Here Mills does small quantity, high quality color lithography, using the Eastman three-color technique for production.

Scientific Litho Products Moves

Scientific Litho Products Co. moved in July from its Philadelphia location to a new 140 x 200' building at 2811 Philmont Ave., Huntingdon Valley, Pa. The firm will continue to make its line of Graph-O-Pake, water fountain etch, pressman's plate etch and Keen plate developing ink. Joseph Handlos, president, indicated the company soon will announce a new product.

COURTESY OF THREE FEATHERS DISTILLING COMPANY



COURTESY OF SIMON & SCHUSTER



COURTESY OF GENERAL FOODS CORP.

Lacquered Lithography

Labels, cards, covers, signs, wrappers, cartons — an endless variety of lithography — protected, functionalized, beautified — by PYROXCOTE® Lacquers, and Paper Coatings — glossy or lustreless — resistant to handling, abrasion, greases, discoloration, weathering and heat blocking.

Apply it on your own varnishing machines or specify it to your finisher. Phone or write for details.

PYROXYLIN PRODUCTS, Inc.
PAOLI, PENNA. CHICAGO 32, ILLINOIS Virginia 7-4800



COURTESY OF BROWN & BIGELOW, INC.



PYROXYLIN PRODUCTS, INC.
Chicago 32, Illinois
Send me free information on
Pyroxcote Lacquers and Paper Coatings.

Name _____

Firm _____

Address _____

City _____ Zone _____ State _____

"New" CYLINDERS For Old!

ALADDIN'S GENIE
COULDN'T DO
A BETTER JOB!

Arthur Tickle's "modern magic"
takes worn or damaged printing press
cylinders and rebuilds them better than new.

Besides saving money on cylinder
replacement, cylinders rebuilt by this process are more
durable because of the increased hardness of the deposited metal (Hard
Stainless Steel, High Carbon Steel, Monel Metal & 18-8 Stainless
Steel). In addition, all cylinders are further checked for size, condition of
bearers and journals and body runout in order to eliminate unnecessary work or
discover hidden sources of future trouble. Cylinder journals, if scored or worn,
are rebuilt with High Carbon Steel (363 Brinell hardness) and ground
to standard diameter, with a resulting increase in the life of the cylinder.



Write, Wire or Phone for Complete Details!

ARTHUR TICKLE ENGINEERING WORKS, INC.

21 Delevan Street • Brooklyn, 31, N.Y.
MAin 5-4200

Degree In Lithography Offered

LeTourneau Technical Institute, Longview, Texas, now is offering a full four-year course in lithography with a bachelor of science degree.

In addition to the basic scholastic courses which the students receive at the institute, with the cooperation of the printing department of the LeTourneau Co., students have the opportunity to work and gain practical experience in a well equipped print shop which includes offset and letterpress.

Courses and practical experience are offered in linotype and make-up, stripping and platemaking, and press operation.

Addressograph Buys Coxhead

The capital stock of Ralph C. Coxhead Corp., Newark, N. J., has been acquired by Addressograph-Multigraph Corp., it was announced jointly last month by J. B. Ward, president of Addressograph, and C. Walter Nichols, chairman of the board of Coxhead.

The Coxhead firm, employing about 800 people in the U. S., manufactures and internationally distributes a line of typecomposing machines which write in 50 languages and 500 interchangeable styles and sizes of type. Coxhead sales for 1956 are estimated to be \$7 million.

Sales, Earnings On Upgrade

Increased sales during the first half of the year boosted net earnings of United States Printing & Lithograph Co., Cincinnati, O., to \$746,638, equal to \$2.16 per share of common stock. This was a 15 percent gain over earnings of \$648,948, or \$1.79 a share, for the like 1955 period.

I.T.U. Teaches New Processes

Four men from the San Francisco Bay area will attend the I.T.U. New Processes School at Indianapolis late this summer, preparatory to establishing paste makeup classes for membership of the San Francisco and Oakland Typographical Union locals. Jack DeMille of the *Call-*

Bulletin and Charles Thompson of Phillips & Van Orden have been chosen from San Francisco applicants, and Joseph Baxley of the University of California Press and Mark Marlais of the Centreville *News-Register* have been chosen from the Oakland area.

Litho Companies Incorporate

Four New York companies recently were granted charters of incorporation. Those listing capital stock of 200 shares no par value were Michael Lith Sales Corp.; American Plate Graining Co., Inc.; and Crown Litho, Inc. Lithofoil Corp., listed capital stock of 100 shares no par value.

Lithography In A Museum

Brown & Bigelow's 1958 calendar line, consisting of brilliantly lithographed pictures of rare and familiar birds, was given an advance display in an unusual place, the Chicago Natural History Museum, during the summer.

Each page of the several series of calendars was hung separately in a display case and alongside was a mounted specimen of the particular bird, selected from the museum's collection and used by the artist, Thomas Dolan, as his model. Also shown in this tribute to his talents were several lithographed point-of-purchase displays, used by an insecticide manufacturer.

Performance is the Reason ...

The Miehle 17 Lithoprint has gained tremendous acceptance since its introduction. Listed here are just a few of the printers who now operate this press to economically produce a wide range of small offset work.

Allied Printers, Inc., Seattle, Wash.
Ardmore Prtg. Co., Ardmore, Pa.
Arrow Press, Milwaukee, Wis.
Atwood Prtg. Co., Stockton, Cal.
The Belding Prtg. Co., Belding, Mich.
Brumley Prtg. Co., Gastonia, N.C.
Creative Arts Co., Kansas City, Mo.
Eddy Prtg. Co., Albion, N.Y.
Hall Prtg. Co., Los Angeles, Cal.
Hanford Press, Washington, D.C.
Ideal Service Press, New York, N.Y.
Kelden Prtg. Co., Cincinnati, O.
Leader Prtg. Co., Indianapolis, Ind.
Lee G. Simmons, New Orleans, La.
The Lockwood Co., Inc., Atchison, Kan.
Midwest Prtg. Co., Chicago, Ill.
Morris Prtg. Co., Inc., Dallas, Tex.
Rybert Prtg. Co., Atlanta, Ga.
Service Press Inc., Hartford, Conn.
Sulter Prtg. Co., Omaha, Neb.
Sutherland Prtg. Co., Montezuma, Ia.
Tri Craft Press, Inc., Detroit, Mich.

Watch for further listings

Sheet Size 14x20"
Design Size 13x17½
Speeds Up To 5000

MIEHLE PRINTING PRESS AND MANUFACTURING COMPANY
Chicago 8, Illinois



Hayes Appointed by Miehle

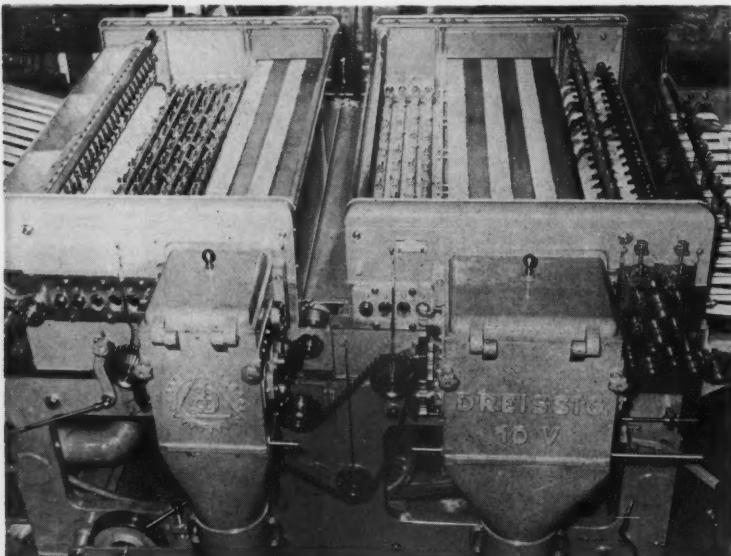
James H. Hayes has joined Miehle Printing Press & Mfg. Co. as manager of the Book and Publication department, it was announced last month. Mr. Hayes, with more than 15 years experience in the graphic arts industry, has been a sales engineer in offset, letterpress and gravure fields for web and sheet-fed presses.

His newly created post is part of an expanding program by Miehle for complete service to the book and publication field. Mr. Hayes will be in

close association with book and publication printers in the U. S. from offices in Chicago and New York.

Wipperman Heads Garrison

Leslie F. Wipperman, president of the Graphic Arts Association of St. Louis, recently was elected president of Garrison-Wagner Printing Co., St. Louis. I. T. Vierheller, former president of Garrison-Wagner, has been elected chairman of the board of the company which does all types of printing, including offset.



The Heavy Duty Flat Bronzing and Dusting Machine DREISSIG KOMBI 10 V

- The KOMBI 10 V combines one Bronzing Machine and one Dusting Machine on a common base. This combined machine is thus extremely space-saving, particularly for those large scale printing shops where the work is continuously going on in several shifts and where, according to experiences, two bronzers used to be connected, one behind the other, to obtain higher production rates.
- In the KOMBI 10 V type construction a space provided between the two machines prevents the bronze powder in suspension in the Bronzer from being carried over to the Dusting Machine. Ten burnishers, ten dusting bands and four dusting-off rollers account for intensive burnishing and really dependable front and back dusting. A special bronze application device, system "Muller," for which patents are pending, saves about 30 to 40 percent of bronze powder, eliminates all danger of transfer of printed parts to other sheets, and avoids whirling up of dust.
- The operator may lower or raise all burnishes evenly and at one time. The Dreissig Bronzer can take a sheet size 52" x 76".

Write Today for Free Descriptive Literature

HENRY P. KORN

5 Beekman Street

Phone: REctor 2-5808

New York 38, N. Y.

Consolidated Opens N. Y. Office

Consolidated International Equipment & Supply Co., Chicago, formally will open its New York office Sept. 17-28. Designated as Printerama, the two-week opening will feature separate visiting days for the various industries of the graphic arts. Special days for ink men, another for the paper men, roller people, photo engravers, trade platemakers, offset printers, and gravure printers will be held. Specialists and personnel in each industry have been asked to assist in answering questions.

At the new office, 330 W. 26 St., two darkroom cameras will be in operation in addition to offset presses, electronic engravers, a Step & Repeat machine, and other Consolidated facilities.

Eli N. Castle Dies

Eli N. Castle, 56, founder and owner of the Castle Printing Co., New York, died Aug 21 in Orange Memorial Hospital, Orange, N. J. Mr. Castle, who had been in the printing and allied businesses for over 30 years, founded his own firm in 1941 after five years as president and sales manager of Lutz & Sheinkman, New York lithography firm. He also was president of the Castle Offset Printing Corp., a subsidiary of Castle Printing Co.

Sales at Donnelley Rise

R. R. Donnelley & Sons Co., Chicago, reported net income of \$3,697,000 or \$1.46 a share for the first six months of 1956, ended June 30. Sales for the six month period rose to \$52,212,000, compared to \$45,773,000 for the similar period last year.

Daley Appointment Announced

The Gevaert Company of America announced last month the recent appointment of Joseph F. Daley to the technical staff of the firm. During the past 20 years Mr. Daley worked for several major printing and publishing houses, devoting his time to the practical end of the photographic divisions. Mr. Daley has had a thorough background in photo offset, gravure and photo engraving.

SPEED

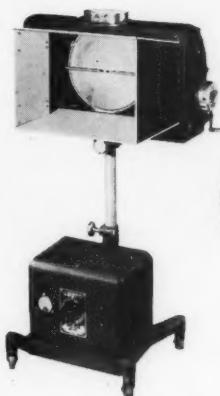
up plate making

THESE LAMPS CAN SAVE YOU
VALUABLE TIME . . . cut process exposure time in
half. Grafarc High Intensity Arc Lamps permit remarkably
sharper reproduction always.



**GRAFARC 95 AMPERE
PRINTING LAMP**

For use with vertical printing frames under 40" x 50"



**GRAFARC 140 AMPERE
PRINTING LAMP**

For use with vertical printing frames 40" x 50" and larger

Remarkably sharper reproduction every time. Dot undercutting eliminated. Uniform coverage of large areas. Illumination variables absolutely eliminated.

Accurate density control regardless of line voltage variations. Constant color temperatures. Power-packed for dense Kodachromes.

Get the lamps that are motor-driven . . . fully automatic . . . reliable. Overhead printing lamps available for use with horizontal printing frames. Burn in normal position, avoiding smoking of reflector and preventing ash from depositing on surfaces in the light path.

Models for Monotype Huebner MH photo composing machines assure precise control of intensity for accurate repeats.

THERE'S NOTHING LIKE A GRAFARC LAMP!

See your Graphic Arts Supply Dealer or send coupon for literature.

THE STRONG ELECTRIC CORPORATION

17 CITY PARK AVENUE

• TOLEDO 1, OHIO

Please send free literature on Strong Grafarc Lamps.

NAME _____

FIRM _____

STREET _____

CITY & STATE _____

NAME OF SUPPLIER _____

A SUBSIDIARY OF





the Craftsman Utility Table

The Craftsman Utility Table is a compact, low-priced table of multiple uses. Handles press line-ups, layouts, negative ruling, plate scrib-
ing, stripping, opaquing and the many functions required by lithographers, offset printers, and various art departments. Has 22½" x 28½" illuminated working surface. Patented compression straightedge helps insure speed with accuracy.

The Craftsman Photo-Lith Layout Table is an instrument of mechanical precision that will give you the greatest possible accuracy in line-up, register, negative and plate ruling, masking, stripping, etc. You'll save time and money and get better work.

Features include: two straightedges at right angles operating on machine cut geared tracks, Vernier dials with calibrations as fine as 100ths, sheet stop guides and grippers, stainless steel scales, and special marking devices for goldenrod layouts, scribing negatives and plates and India ink ruling. Available in 5 sizes with working surface from 28" x 39" to 62" x 84".

See both of these tables, fully equipped, at N. A. P. L. Convention, Hotel Commodore, New York City, Sept. 19-22, Booths 30-31.



CRAFTSMAN LINE-UP TABLE CORP.

55-K River Street

• Waltham 54, Massachusetts

NEW EQUIPMENT SUPPLIES, BULLETINS

AnSCO Makes New Fixer

A new, premium-type, all purpose film and paper fixer, called 3½-5 Rapafix, has been announced by AnSCO. Based upon a formulation which employs special faster acting chemicals, the new AnSCO Rapafix fixes films and prints thoroughly in less than five minutes, the company said.

The new fixer comes in single powder form, to be dissolved in three and one-half gallons of cold water for use as a film fixer, or in five gallons of water when used as a print fixer.

•

New Dry-Diazo Developers

Peck & Harvey Mfg. Corp., 5650 N. Western Ave., Chicago, announced last month a new line of Speedmaster dry-diazo developers specially designed for offset printers and lithographers to cut color-proofing costs and speed production of two, three and four-color jobs.

According to the company, the new developer provides accurate ammonia dry-diazo type color separation proofs from positive photographic film separations, in minutes at a reduced cost. The Speedmaster operates at a constant speed of 10 ft. per minute. Manually operated variable heat and ammonia controls assure proper color tones for complete accuracy.

The company claims that any material exposed in a vacuum frame, blue print machine, diazo-moist printer, or similar type of reproduction equipment, can be efficiently developed in the Speedmaster.

•

Announce Binocular Magnifier

A new three-dimensional binocular magnifier, designed to help speed production and lower costs, has been announced by Edroy Products Co., 480 Lexington Ave., New York. The

Magni-Focuser has been produced for persons needing extra magnification for precise work. The binocular magnifier comes in five magnification sizes with an additional three sizes of auxiliary lenses.

LTF Issues Revised Brochure

The Lithographic Technical Foundation has distributed to its members a revised brochure of self-teachings materials. The new brochure, with 20 basic subjects, lists available material on photography, stripping, opaquing, color correction, platemaking and pressmanship.

•

Robertson Readies New Line

Robertson Photo-mechanix, Inc., Chicago, announced last month that its complete line of platemaking equipment has been fully re-designed. The newly designed units will be available early in the fall, the company said, and will include a new type of make-up, layout and stripping table, employing a new approach to illumination.

Two new series of floor type vacuum frames are also included. One is the inexpensive "Economite" utility frame and the other is the heavy duty model F frame. Several new sinks

Leadership is Earned... *The All New W. A. BROWN* Platemaking Equipment

• Partial list of complete line of BROWN platemaking equipment.

- 1 DOT ETCHING TABLES
- 2 ADJUSTABLE LAYOUT AND STRIPPING TABLES
- 3 TEMPERATURE CONTROLLED DARKROOM SINKS
- 4 ELEVATING TYPE VACUUM PRINTING FRAMES
- 5 VACUUM PRINTING FRAMES
- 6 LITHO PLATE WHIRLERS



Progress must be made if leadership is to be earned... and the all *new* W. A. BROWN platemaking equipment is another example of why BROWN equipment, through the years, has earned its position as "The World's Finest Photomechanical Equipment."

W. A. B R O W N
MANUFACTURING CO.
608 S. Dearborn St., Chicago, Ill.

DEALERS IN ALL PRINCIPAL CITIES



Visit Our Booths, 28-29; NAPL Convention

will be introduced, including a new temperature controlled unit and a stainless steel developing sink.

Macbeth Develops New Arc Lamp

Macbeth Arc Lamp Co., Philadelphia, has developed a new 140 ampere, high intensity, motor-controlled printing lamp for large frame use, it was announced last month by the firm.

The new lamp, B 1C Constantarc, features a wide reflector and uses a full 12" trim of high intensity carbons. According to the manufacturer, the new lamp has automatic arc-control and self-compensating transformers to maintain constant light intensity and color temperature regardless of fine voltage fluctuations.

Jones Introduces New Solution

A new line of JGP deep-etch coating solution and associated chemicals for lithographic platemaking has been announced by Jones Graphic Products, Albuquerque, N. M. The new products are one of the initial developments to come from the firm's branch laboratory in Toledo, O.

An introductory kit is available, comprised of etching solution, non-blinding lacquer, developing ink, a developing pad and an etching pad, all designed for deep-etch work. Because the pads must not come in contact with water, the plastic pad handles are removable for easy cleaning. For identification, the developing and etching pad handles are color-coded.



H. S. Tasker, president of Ilford Inc., welcomes guests at Ilford press luncheon, Hotel Pierre, New York, June 28.

At his left are Gerald Finsen and Mr. John A. Hill, the latter of Ilford Ltd., London.

Ilford Opens New York Branch

ILFORD INC., an American subsidiary of the British photographic firm of Ilford Limited, has opened offices and warehousing facilities at 37 W. 65th St., New York City. Ilford's complete line of materials will be available for the first time from established graphic arts dealers throughout the country.

H. S. Tasker, president of Ilford Inc., announced that the new American subsidiary of the worldwide photographic concern will stock and distribute the entire line of Ilford graphic arts materials.

Included in Ilford's graphic arts materials line are films, plates, papers, chemicals, filters and darkroom safelights. More than 20 graphic arts plate specifications are offered in the standard Ilford

line, ranging from panchromatic, orthochromatic through the specialized plates for every conceivable requirement, according to the company. Nineteen films are catalogued in the Ilford graphic arts listing. Film emulsions are available on special shrink-resistant bases. Lith-type emulsions are offered for hard dot quality.

A 44-page catalogue of Ilford's graphic arts material is available to lithographers. In addition to complete specifications on all Ilford plates, films and other materials, the book contains an explanation of the specifications code, and a center section on recommended techniques and materials. This section covers block-making, photolithography, photogravure, collotype and silk screen.

New 2-Way Rotogravure Arc

The nuArc Co., Inc., Chicago, announced recently a new G-150 Motor-driven Arc Lamp with a two way reflector. The lamp is reported to be a powerful and the only motor-driven lamp ever offered the industry with a single point light source reflecting in two directions.

It was developed for the rotogravure industry to enable exposure

of two frames at one time and with exactly the same intensity and color temperature of light. The G-150 develops 150 amps at the carbons. It burns steadily with very little fluctuation and gives excellent coverage. It has been tested and approved by some large rotogravure houses.

nuArc advises they will soon announce 150 amp lamps for cameras and printing frames.



IMMEDIATE *Touch-dry*
PRINTING NOW
POSSIBLE! with
TRIK[®]
QUICKSET
INK CONDITIONER

for both Litho and
Letterpress...Work-
and-Turn Printing!

MESSY
Eliminates *Non-Offset Spray Equipment in Most Cases*

Ink offsetting is now a thing of the past because of the amazing quick-drying properties of TRIK. Will deliver impressions of highest quality without the use of non-offset spray or other means of mechanical drying. Do work-and-turn printing without smudge or sticking. Holds ink open on press. TRIK is homogenized, remains stable indefinitely, mixes readily with all inks. Send for trial order today.

Other Nationally Known Central Products

33 and 0-33 Ink Conditioners . . . for sharper halftones, livelier colors.

GLAZCOTE . . . Scratch-resistant, for tough, mar-proof surfaces.

20/20 Overprint Varnish, for tough, brilliant finishes.

Send for your TRIAL ORDER TODAY
... MONEY BACK GUARANTEE!

Central COMPOUNDING COMPANY

1720 North Damen Avenue • Chicago 47, Illinois

Yes, we're interested in TRIK. Please

Send your special 4 lb. introductory container. Check for \$6.00 is enclosed, and I understand my money will be refunded immediately if not satisfied.

Send complete technical bulletins on TRIK and your other ink additives.

NAME _____

FIRM _____

STREET _____

CITY _____ ZONE _____ STATE _____

COMPOUNDING COMPANY
1720 North Damen Avenue • Chicago 47, Illinois

EXPORT: Guterman Co., Inc., New York 4

Manufacturers of Printing Ink Additives Since 1939

**Gaetjens,
Berger
& Wirth, Inc.
New York**

*William Recht
President*



HAVE YOU SEEN OUR NEW OFFSET FOLDER —
44 COLORS ON ONE SHEET — ASK FOR IT!

Manufacturers of fine printing inks for
the graphic arts . . . over a century of
manufacturing experience.

35 York St., Brooklyn 1, N. Y.
Tel.: ULster 8-4100

440 Birchmount Road, Toronto 13, Ontario, Canada — Calzada Ixtapalapa 326-B, Mexico 8, D. F., Mexico

**William
Recht
Co.
New York**

*Graphic Arts
Specialists*



Featuring "REXON" rubber blankets and
other litho supplies. New supply cata-
log is available.

50 Church St., New York 7, N. Y.
Tel.: Cortlandt 7-8395



... can be eliminated . . . effectively, safely, inexpensively. The SIMCO "Widget" is guaranteed to be the surest means of static control available . . . for all printing machinery, under all operating conditions. Write today for information and prices of Simeco's complete line, including the new "shockless" bars which are perfectly safe to use even in inflammable atmospheres.

the SIMCO company
920 Walnut Street, Lansdale, Pa.

Chandler Line Handled By ATF

American Type Founders announced recently that it is once more handling Chandler & Price's line of presses, paper cutters and accessories. The firms renewed a 60-year-old business relationship, begun in 1892. Since 1952 arrangements between the companies had been temporarily suspended.

Among the new products ATF is distributing is a new Chandler & Price craftsman automatic platen press.

Aid for Filter Selection

A new color printing aid for filter selection and exposure determination has been made available by Eastman Kodak for use with Kodak color print materials, type R and type C, and Ektacolor print film.

Primary purpose of the Kodak CC Filter Dataguide is to show how various Kodak color compensating filter combinations for color printing can be simplified and the neutral density eliminated. This problem arises when a combination of filters has been chosen by trial and by viewing the print through filters for further correction. This process may result in an excessive number of filters, some of which do nothing but add neutral density.

The Dataguide has three calibrated dials which are used to solve any CC filter problem encountered in color printing. When the filter combination which gives the most pleasing color balance is determined, these dials are adjusted and used with a swinging arm to determine the simplest combination of filters.

Miller Markets 'Dustroyer'

The Miller-Trojan Co., Troy, O., now is marketing its new Dustroyer, which provides for continuous circulation of clean, fresh air inside a darkroom. This 275 CFM capacity unit pumps air into a darkroom through a filter and pressurizes the interior so that odor-laden, stale air is repelled, along with dust particles. The Dustroyer can be plugged into any 110 volt AC outlet and is operated by a single toggle switch.

Williams Lithograph Co. Occupies New Site In San Francisco

Williams Lithograph Co., 29-year old San Francisco firm now headed by Jack Miller, has purchased a two-story and basement building. The firm's camera, platemaking and press equipment are housed on the first floor in approximately 18,000 sq. ft.



ALERT LITHOGRAPHERS! USE S&S FLATBED OFFSET PRESSES —two, three or four to a shop...WHY?



DUFA VI shown; two other models,
five sizes to choose from.
Send for specifications.

— because they're built to emulate production press conditions, but cost much less to buy and to run. Look at these features, they're the keys to performance and savings: *automatic inking* with *three large form rollers* — more than you'll find on other proofing presses; *motor-controlled dampening system* with an *extra dampener* provides continuous, even water distribution; centralized controls; time-saving wash-up device; heavy-duty construction. For real press-room efficiency, use S&S flatbed offset presses for proofing, for short runs of color pictures and posters, for specialty printing on wood, plastic or metal.

* ask for names

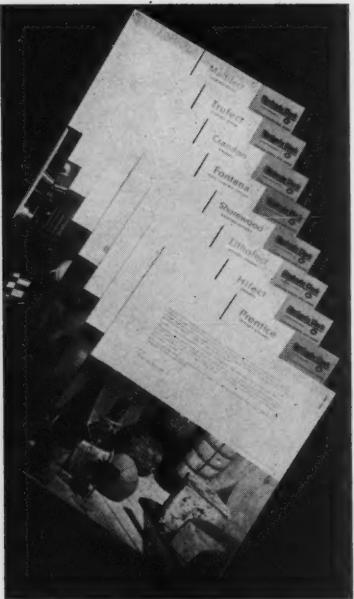
New!

DUFA VI
Semi-automatic
up & repeat machine
Ask for details.

AMSTERDAM CONTINENTAL

Types and Graphic Equipment Inc.

268 FOURTH AVENUE, NEW YORK 10, N. Y. • SPRING 7-4980



K-C Releases New Paper Samples

Coated paper samples featuring four-color and monotone halftones are being issued by Kimberly-Clark Corp., Neenah, Wis. The "periodic samples" were produced under average pressroom operating conditions and the printed results of each grade show the kind of reproduction lithographers should and can get on the various grades of paper.

One of the most valuable features of the samples, according to Kimberly-Clark, is that they are issued on a regular basis of three times a year. This enables the printer always to have samples of current quality paper in his files. Each sample is dated and color coded, and they are available in either 6 x 9" or 8½ x 11" file folders that also are dated and color coded.

Intertype Adds New Faces

Intertype Corp. announced last month it has added 15 type faces to its line of Fotosetter faces. Three pages of advance proofs now are available, showing Bodoni Modern, Cornell, Cornell Italic, four additional weights in the Futura series and three additions to the Gothic series.

Also included are light weights of Futura 18 pt. Advertising Figures, which are available with size C top aligning figures. These combine with

matrices from regular 8 and 12 pt. basic fonts to provide rapid settings of grocery, drug and department store display advertising.

Davidson Issues Tech. Bulletin

An eight-page technical bulletin, "Numbering on the Davidson Dual-Lith," recently was published by the Davidson Corp., Brooklyn, providing detailed information and instruction for performing a variety of numbering operations on the Dual-Lith.

Step-by-step instructions are given for horizontal, vertical and combination numbering operations and are illustrated with numerous photographs. Instructions are given for adjusting the register of the numbering head and also the tripping cam to give both accurate and synchronized operations.

Dexter Offers New Brochure

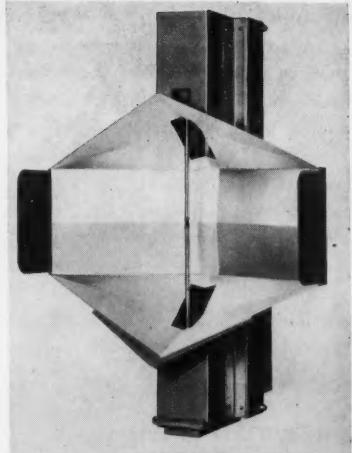
A new six-page brochure, describing its 150-sheet-per-minute metal sheet feeder, is being offered by Dexter Folder Co. Information on eight operating features, as well as data describing conveyors, is included in the brochure.

Aid To Cutting Paper Costs

A pamphlet describing how to help keep paper costs down has been issued by the Waste Paper Utilization Council, New York. The Council offers these hints to plant managers:

Instruct operators to distinguish between acceptable and undesirable products; trace objectionable materials from the time of entry into your plant to see that they do not get into waste paper and destroy its value; make sure that plastic coated papers and film laminated papers are completely withheld from waste paper stock.

The Council urged printers to watch for heat-sealing adhesives which will soften and become sticky when heated, making trouble for the user of waste paper.



Strong Announces Arc Lamp

A new, improved and mechanically-simplified Grafarc Challenger camera arc lamp will be shown for the first time by the Strong Electric Corp., Toledo, O., at the National Association of Photo-Lithographers convention, Sept. 19-22, in New York's Hotel Commodore.

The lamp has been designed with special consideration of the requirements of a modern camera galley and has been engineered to provide a better light source at a price within the reach of even the smallest shop, the company said.

Like the entire line of Grafarc lamps, the Challenger is completely and automatically motor driven. When the lamp is turned on, the new type motor instantly advances the carbons, strikes the arc, backs up the carbons to establish the correct arc gap length, and steadily feeds the carbons at a rate which maintains the proper gap throughout the burning of the trim.

Its action is sensitive both to current and voltage conditions at the arc, and automatically compensates for any variables in the burning rate of the carbons. Ample power insures reliable drive of the carbon feeding mechanism at all times.

Carlson Offers New Punch

The Chesley F. Carlson Co., Minneapolis, announced its new step and repeat punch last month. According to the company, the Carlson punch was designed so the smaller litho plate maker can step images by using register holes and pins.



we don't have a horse!

—but we can come to your rescue in other ways!

We have rollers that meter and lay ink so accurately to your litho plates that you'll have time to see where you're going.

You'll see a constant flow of ink producing a constant stream of impressions, without gray-out, hickies or color variations.

You need good ink coverage to protect your plate images.

Fine Ideal rollers cost so little, yet are such excellent insurance against press shutdowns, loss of costly paper stock, and broken delivery promises that you can't afford to be without them.

Check your roller supply today—be certain you have sufficient spare rollers.

Remember — it takes time to make an IDEAL roller!



IDEAL ROLLER & MANUFACTURING CO.

CHICAGO 8, ILLINOIS LONG ISLAND CITY 1, N.Y.
HUNTINGTON PARK, CALIF. CHAMBLEE, GEORGIA

BUSINESS BUILDERS

FOR PRINTERS
with an eye to
EASIER SALES
and, naturally,
MORE PROFITS



and here are 2 more Sales Aids: **THE PERFECTION TWINS!**

Our series of Helpful Hints and our Sample Book are indeed a pair of Perfection Twins, born of our understanding for Printers' needs. Available from any Perfection Distributor. Complete list may be found in Walden's "Paper Catalog."

PERFECTION SAMPLE BOOK

Enables you to pick the RIGHT gummed paper for the job EVERY TIME. It contains a wealth of information on printing surfaces, types of gumming, handling of gummed paper for best results, basis weight before gumming, sizes, etc.



PERFECTION HELPFUL HINTS

A series of highly informative printed sheets dealing with various phases and uses of gummed paper. Printers and lithographers can avoid many headaches and make gummed paper printing a profitable business by following the ideas and suggestions in these widely acclaimed sales builders.



Call your Fine Paper Merchant, Ask for
a Quality Gummed Paper You Can ALWAYS Depend On!

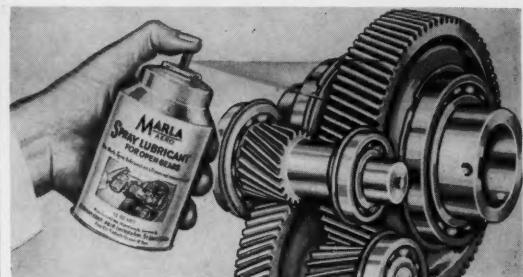
PERFECTION®
FLAT GUMMED PAPER



Perfection is made by
PAPER MANUFACTURERS CO.
PHILADELPHIA 15, PA.
SALES REPRESENTATIVES
Atlanta, Chicago, Cleveland, Kansas City, Los Angeles,
New England, New York, Philadelphia
PACIFIC COAST WAREHOUSES: San Francisco, Los Angeles
PLANTS: Philadelphia, Indianapolis

MARLA

OPEN GEAR SPRAY LUBRICANT



Use On All Gears Not Running In Oil

Absolutely Nothing Else Like It!

OUTLASTS ORDINARY LUBES 5-to-1

Sticks To Metal

1. ECONOMICAL — Spray container reduces lubrication time. Long lasting film. One can covers approximately 25 sq. ft. of surface with no waste.
2. HEAVY DUTY — The finest extreme pressure adhesive lubricant there is for open gears.
3. EASY-TO-USE — No fuss . . . no muss. Ease of application encourages and assures complete lubrication of open gears.
4. CLEAN — No drip . . . no throw off . . . no clean up of excess lubricant. Will not drip in hot or steamy areas.
5. SPRAY — Assures perfect lubrication even to the most hard-to-get-at areas.
6. HANDY — Marla Spray Lubricant can be carried easily and is always ready for use. Eliminates the brush, paddle or any pre-heating.
7. VERSATILE — A superior lubricant also for cams, reciprocating actions, mono rails, guides, chains, sprockets and cables.

Prices F.O.B. Your Plant

Case of Six — 12 ounce Cans.....	\$10.74
Case of Twelve — 12 ounce Cans.....	21.00

— Jobber Inquiries Invited —

Mfg. And Guaranteed By

ROTHIAN CORP.

3618 Laclede Ave.
St. Louis 8, Mo.

LTF Revolving Fund Growing

The Lithographic Technical Foundation announced last month it already has received \$13,000 toward its revolving fund goal of \$175,000 to be used for investment in projects which will return at least their cost. The fund also is being raised to provide for the purchase of the Foundation's Chicago research building in 1958. Only \$75,000 of the fund will be for the building, which the Foundation has had rent free for 13 years.

Anesco Appoints Demaree

James P. Demaree has been appointed Binghamton, N. Y., district manager for Anesco, division of General Aniline & Film Corp., it was announced Aug. 21. Mr. Demaree has been with Anesco for 12 years and prior to that was engaged in photographic retailing and free-lance photography.

He has been employed in various staff sales capacities and for the past seven years has been an Anesco senior salesman, first in New York, and more recently in Pittsburgh.



Lithography Contributes To Success In New Toy

HIGH quality lithography done on Falpac coated board has contributed to the success of a new toy recently developed by Morgan Development Laboratories, Inc., Westport, Conn. Close register lithography and high color were important requirements for the toy, which is unique in that it combines recorded children's songs and three-dimen-

sional filmless color movies on a standard 78 rpm player.

Lutz & Sheinkman, New York color lithographers, lithographed the records with multi-colored animated figures. The new toy, Magic Mirror Movies, has a scratch-resistant clear acetate surface, is bound with a rolled edge, and has a metal centered grommet.

HILL RUBBER CO., INC.

GOODF^YEAR Rubber for Printing

BEST IN RUBBER — BEST IN SERVICE

2728 Elston Ave. • Chicago 47, Illinois
731 Commonwealth Ave. • Massillon, Ohio
3510 Gannett St. • Houston 25, Texas
16048 Via Paro • San Lorenzo, Calif.

GOODF^YEAR VELVA-TONE OFFSET PRESS BLANKETS

★ IN CHICAGO STOCK ★

Supplies for Rubber Printers

Prices on Request

"SERVICE IS OUR BUSINESS"

GRUMBACHER

NEW
PATENT RED
MASKING INK
FOR COLOR
SEPARATIONS
AND OVERLAYS
ON ACETATE • VINYL • GLASS
GLASS TRACING CLOTH

No. 1470
PATENT RED

2½ oz. \$.75
8 oz. 2.25
32 oz. 8.00



WATER SOLUBLE • TRANSPARENT

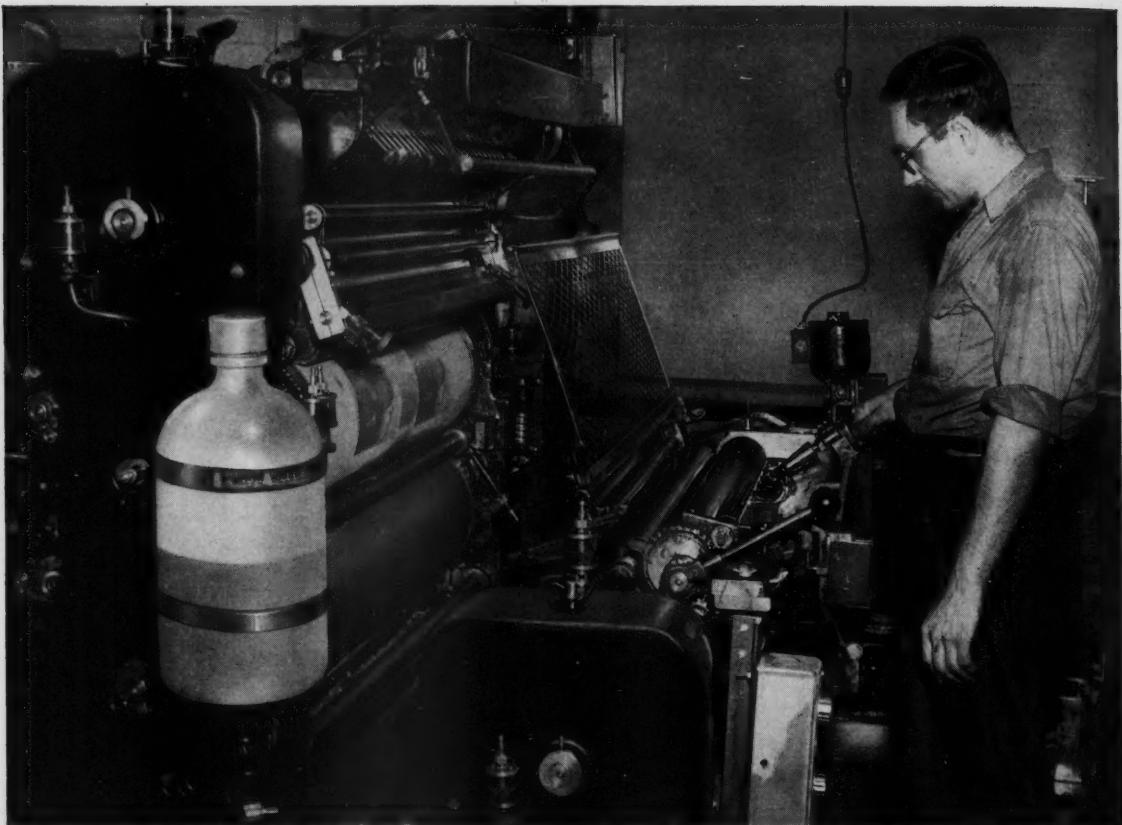
PERMITS THE ARTIST TO "SEE-THROUGH"
FOR ACCURACY OF REGISTER IN
MASKING OR COLOR SEPARATION

- Photographs black for line cut reproduction.
- Works with pen, brush, ruling pen or air brush.
- No stirring ... remains in suspension.
- No special thinners required.
- Scribes cleanly on frosted acetate.
- Easily removed with water from the overlay without leaving color stains.

SEND FOR FREE SAMPLE TODAY

M. GRUMBACHER

477 WEST 33RD ST., NEW YORK 1, N. Y.



Both color units of this Harris LTP 23 x 36 two-color offset press are equipped with Baldwin Water Levels and Style C Ink Fountain Agitators. Developed specifically for small presses, the close-coupled Style C Agitator gives the operator easy access to all parts of the press.

How to Equip Your Presses to Control Ink and Water Problems

Here's a way to cut operating costs and improve quality on small as well as large presses.

MAINTAIN the right balance of ink and water and you'll be sure of consistent high quality in lithography."

That, according to a leader in the graphic arts, is the "secret" of building a reputation for excellent work. And it explains why more and more offset presses are being equipped with Baldwin® Ink Fountain Agitators and Water Levels—equipment designed specifically to keep ink and water-fountain solutions in perfect condition and assure the balance of ink and water that guarantees the maximum run of flawless sheets.

Substantial Ink Savings

Baldwin Ink Fountain Agitators keep ink thoroughly mixed while it is force-fed to the fountain rollers. Lithographers say this means less ink is needed to start with—just enough for the job at hand. What's more, the Agitator is equipped with a sepa-

rate motor drive so ink can be kept mixed during press shutdowns: there is no ink-wasting skin to be fished out of the fountain and thrown away.

Color and Quality Control

The result is better control over color and quality with substantial savings in time and money, as well as ink. And reports from a large number of lithographers show that these savings are made regardless of press size or whether the run is long or short. In fact, even owners of small presses say the savings in ink alone soon pay for their agitators.

Baldwin Ink Fountain Agitators are furnished in two styles: Style B for large presses, licensed under Patent No. 2,234,754; and Style C, on which patents have been applied for, featuring a compact, close-coupled design with special advantages on small presses. It takes only a minute to clean the single cone of either style.

Water Spills Eliminated

Baldwin Water Levels maintain constant fountain-solution level automatically . . . stabilize fountain settings . . . assure just the right balance of ink and water. An automatic non-spill valve eliminates sheet-spoilage caused by water spills when the fountain is filled. The unbreakable polyethylene reservoir has these important advantages: It keeps the water free of airborne contaminants, it cannot rust or corrode to set up chemical reactions in the fountain solution, and it permits water level to be checked at a glance. A controlled supply of fresh solution in the fountain is assured when a press is equipped with Baldwin Water Levels.

Illustrated Literature

Complete data and illustrated literature on Baldwin Ink Fountain Agitators and Water Levels can be obtained by sending the make, model, and size of your equipment to William Gegenheimer Co., Inc., 80 Roebling Street, Brooklyn 11, New York.

Chicago Lithographic Institute Begins 10th Year

THE CHICAGO LITHOGRAPHIC INSTITUTE started its 10th year of operations the week of Sept. 10 with a total enrollment in all courses well above the 200 mark. Transfer of the school from Glessner House was completed during the summer and all classes are now meeting in the new quarters at 1611 W. Adams St. Apprentice courses covering nine subjects in all branches of the lithographic trade are being presented and three courses are offered for junior executives and salesmen. Informal discussion classes for journeymen and supervisors, which were tried out last year, are being expanded to a greater degree than before, Frank F. Oehme, executive director, announced.

A wider range of daytime courses are being conducted this year, he said, for second and third shift men. For the first time in the school's history, for example, a daytime chemistry class will be offered.

Negotiations were under way last

month with the Army Air Force, Mr. Oehme stated, with the expectation that a new contract will be arranged providing for an extension of the program which offers post graduate training for Air Force litho unit personnel at the Chicago school.

The Institute is also cooperating with the Chicago Lithographers Association and the Federal Department of Labor on development of a standard apprentice training course for lithographers, intended to strengthen the industry generally and very definitely foreshadowing an increasingly important position nationally for the Chicago Institute.

The new school quarters, which occupy two floors and basement of an annex to the new home of Local 4, ALA, are completely air conditioned. Some equipment was brought along from Glessner House, but most of the facilities, provided through courtesy of the manufacturers, are brand new and latest model.

Harris, Seybold Co. has donated a much needed 2-color, 22 x 34" offset press. Miehle Printing Press & Mfg. Co. has put in a new Miehle No. 29, single color, and American Type Founders has added another Webendorfer 17 x 22" Chief to the pressroom complement.

Among other new equipment are the following: two process cameras; three temperature control sinks; two stainless steel sinks; four stripping tables; two plate whirlers; two vacuum frames; two arc lamps; and one down draft table. In addition to the three press manufacturers mentioned, Mr. Oehme listed the following firms as contributors of equipment: Consolidated Photoengravers & Lithographers Equipment Co.; W. A. Brown Mfg. Co.; Lanston Monotype Machine Co.; NuArc Co.; H. Schmidt & Co.; Vandercook & Sons Co.; Zarkin Machine Co. Several donors requested anonymity as to their gifts, Mr. Oehme said.

Compare the Lens you now use with the New GOERZ "RED-DOT" ARTAR
Now specified by ALL leading Camera manufacturers!



GOERZ
RED DOT
ARTAR

The Lens with greater covering power
plus hidden reserves!

The increased demand for better color and black-and-white reproduction has made the new GOERZ "RED-DOT" ARTAR first choice in process lenses. It's fully color-corrected and anti-reflection coated...two "musts" if you strive for the best! An inferior or old-fashioned lens can cause your cameraman serious trouble. An additional focal length will make your camera more versatile. 15-DAY FREE TRIAL! IMMEDIATE DELIVERY. Write us—we may be able to select a lens to fit your present camera calibration.

Focal Length Inches	Film Covered	Price in Barrel
4	4x6	\$102.00
6	6 1/4x9 1/2	129.50
8 1/2	9x12	146.00
9 1/2	10x14	179.50
10 1/2	12x14	179.45
12	12x18	222.00
14	16x20	252.00
16 1/2	18x22	268.75
19	20x24	282.00
24	25x32	364.00
30	30x40	578.00
35	35x45	795.00
42	48x56	965.00
47 1/2	48x64	1185.00
70	72x90	On Req.

RUTHERFORD

KENKO GRAPHICS



REPRO-ART

Robertson

LANSTON MONOTYPE

Consolidated

ATP



KEMART

Manufactured only by
C. P. GOERZ AMERICAN OPTICAL COMPANY, INWOOD 96, L.I., N.Y.

The Lens without a peer!

"CHAMPION" Deep Etch DOWN-DRAFT Lithographers Work Table

COMPLETELY ELIMINATES ALL HAZARDOUS FUMES

Check these advantages:

- ✓ Removes all hazardous fumes at their source—no odor in shop and offices.
- ✓ Table at convenient working height.
- ✓ Exhaust slot removes contaminated air through slot all around perimeter of working area at high velocity.
- ✓ Acid resistant KOROSEAL lined disposal pitches to a KOROSEAL lined 2" drain.
- ✓ Processing of plates on an everlasting smooth surfaced slate slab.
- ✓ Large heavy duty ball-bearing type built-in suction blower operates quietly and is belt driven by a standard speed motor.
- ✓ Reduces absenteeism.
- ✓ Tends to reduce insurance rates.
- ✓ Increases production.

SOME OF THE USERS OF "CHAMPION" EQUIPMENT

IN CHICAGO:

Jahn & Ollier Engraving Co.
Chicago Litho Plate Graining
Co.
American Offset Co.
Collins, Miller & Hutchings
Superior Engraving Co.
R. R. Donnelly & Sons Co.
Central Type Setting Co.
Caspers Tin Plate Co.
American Can Co.

OUT-OF-TOWN USERS

Eastman Kodak Co.
Rochester, N. Y.
Gugler Litho Co.
Milwaukee, Wis.
Conner Lithographers
Detroit, Mich.
Hall Brothers
Kansas City, Mo.
Epsen Litho Co.
Omaha, Neb.
Atlanta Litho Co.
Atlanta, Ga.
Crane Howard Litho Co.
Cleveland, Ohio
Arrow Engraving Co.
Cleveland, Ohio
Marathon Corporation
Neenah, Wis.
A. L. Garber Co.
Ashland, Ohio
Litho Plate Service Co.
Toledo, Ohio
American Litho Co., Inc.
Atlanta, Ga.
Ideal Litho Service
San Antonio, Texas
Strobridge Litho Co.
Cincinnati, Ohio
Lithographic Plate Service
North Hollywood, Cal.

IN LOS ANGELES:

Mission Engraving Co.
Dillion Lithograph Co.
Colortone

DISTRIBUTORS

Bridgeport Engraver's Supply Co.
California Ink Co.
Harold M. Pitman Co.
E. T. Selleberger Co.
Roberts & Porter, Inc.

IN CANADA
Toronto Type Founders Co., Ltd.
Letimer, Ltd., Toronto
Robert Altwirth, Ltd., Toronto



4 POPULAR SIZES

No.	Slate Slab	Overall Dimensions (All 33½" High)	Exhaust Blower Capacity: Cu. Ft. Air Per Minute	Motor H. P.
1	30"x40"	42"x50"	2500	1
2	42"x50"	54"x62"	3200	1½
3	50"x60"	62"x72"	4200	1½
4	60"x80"	72"x92"	4800	2

"CHAMPION" Improved TEMPERATURE CONTROLLED Developing Sinks



MAINTAINS EVEN
TEMPERATURE WITHIN A
FRACTION OF A DEGREE

Features:

- ✓ Recirculating pump equalizes sink water temperature by forced flow of water around and under developing trays.
- ✓ Will maintain separate desired temperatures for sink trays (heating and cooling) and for storage compartment (cooling) to within a fraction of a degree of setting.
- ✓ Equipped with latest type hermetically sealed, trouble free refrigerating unit.
- ✓ In operation a continuous flow of water is not required. Result: no water wasted.

#1.....	3 Trays.....	20x24 Film Size.....	32½" x 74"
#2.....	3 Trays.....	26x30 Film Size.....	39" x 93"
#3.....	3 Trays.....	30x40 Film Size.....	49" x 105"
... and other sizes available for your special requirements.			

manufactured by **H. SCHMIDT & CO.**

ESTABLISHED 1891

317 S.



Advertising Show Nov. 19-21

Graphic arts suppliers will be included in the exhibitors at the fifth Advertising Essentials Show, Nov. 19-21, at New York's Hotel Statler.

Over 100 exhibits of the newest products and services for the advertising field will be shown, including art and photographic services, visual aids, advertising specialties, packaging and allied services of interest to advertising executives.

PIA Holds Association Institute

Managers of local associations throughout the U.S. and Canada, which are affiliated with Printing Industry of America, joined in PIA's first "Association Managers' Institute" held last month at the Kenwood Golf and Country Club, Bethesda, Md.

Each national association program was reviewed as to its short and long-term objectives. Major time was devoted to an explanation of how the programs and services of PIA might be coordinated with those of its affiliated associations to more effectively assist the industry members in the profitable conduct of their business.

Associations attending the institute included Graphic Arts Associations of Illinois, Baltimore, Houston, Connecticut, Wisconsin, Nebraska, Washington, Toronto and St. Louis.

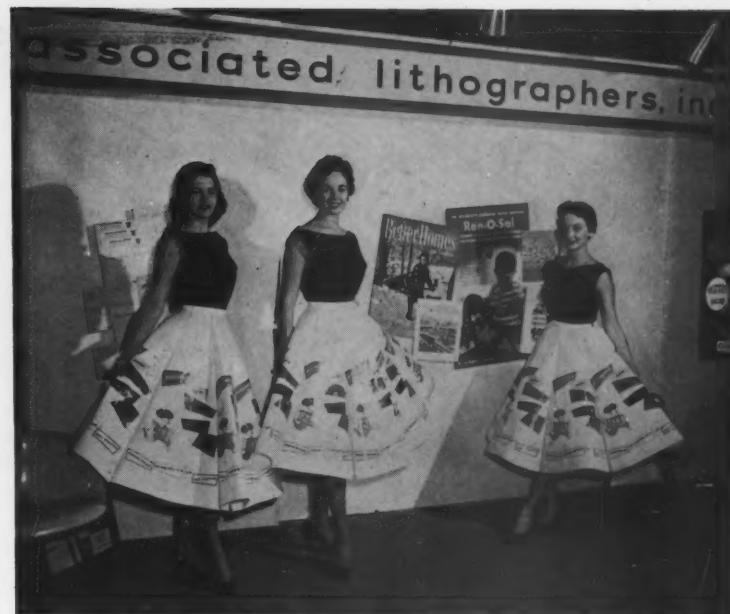
Winners Announced in Contest

Whiting-Plover Paper Co. has announced the 24 winners, from over 500 entrants, in its nationwide Plover Bond Letterhead Competition. The competition honored printers' craftsmanship, as demonstrated on Plover Bond, and the services of distributor salesmen.

The 12 printers and 12 salesmen will visit the Whiting-Plover plant, Stevens Point, Wis., on Sept. 28 and then will be treated to a weekend at the nearby Northernaire resort.

New Fourdrinier For Champion

Heading a long-range program for the expansion of the production facilities of Champion Paper & Fibre Co., Hamilton, O., the installation of a new Fourdrinier paper machine at



May it never be said *Modern Lithography* doesn't have an eye for beauty. Early this year (see *ML*, Feb. '56, p. 138) we ran a picture of the Iowa Products Show in Des Moines, featuring the lithographed skirts worn by the above young ladies. The skirts and girls were features of the display of Associated Lithographers, Inc., Des Moines. Knowing that the girl on the

right was destined for greater things *Modern Lithography* used her picture in connection with the story. And now our faith in beauty has been rewarded, because Miss Carol Morris, extreme right, recently was crowned Miss Universe. Other girls in the photo are, l. to r., Kaye Cunningham and Kit Coffman. All three girls appeared in the show.

the company's Carolina division was announced late last month.

The new 220" machine is expected to be in operation some time in 1959. The company reports the machine is capable of speeds up to 2,000 ft. a minute. It will be one of the largest existing machines in the production of a wide variety of white business papers, the company stated.

Julius Named Plant Supt.

Nathan Julius has been appointed plant superintendent of Sanderson Brothers, printers and lithographers, North Abington, Mass. Mr. Julius will be in charge of the quality lithography of the firm.

Rust Craft Vice Pres. Dies

Frank P. Doolin, 67, of Dorchester, Mass., vice president of Rust Craft Publishers, Inc., Dedham, Mass., died Aug. 22 at his summer residence in Wareham, following a long illness.

Born in South Boston, he served with Rust Craft for 34 years, being elected to vice president eight years

ago. Prior to that he was plant superintendent.

PIP Announces New Courses

Printing Industries of Philadelphia, Inc., announced last month that four new courses will be introduced in its 1956-57 evening school program for persons in the graphic arts.

Courses in management, collective bargaining, paper and paper making, and sales will be offered for the first time. In addition, shop courses at Murrell Dobbins Vocational School will be available.

Dayton Firm Expanding Plant

The Reynolds & Reynolds Co., lithographers, Dayton, O., have begun construction of a new building to house its rotary printing department. The building will provide 25,000 sq. ft. of manufacturing and storage space. The ground floor of the concrete and brick structure will house printing operations and supplementary bindery and shipping departments.

VERSATILE
DEPENDABLE
ACCURATE

CAESAR-SALTZMAN CONDENSER TYPE ENLARGER

Here's our answer to your demands for a Caesar-Saltzman Enlarger with Condenser Light Source. We have added to the sturdy, time proven Enlarger a flexible Condenser Light Source which is the product of much research and experimentation. The Enlarger with condenser Light Source has been thoroughly tested by some of the top men in the professional field and their verdict is "everything we asked for and more."

Accessories Available:

- Three Point Glass Negative or Peg Registration System
- Lenses of Short Focal Length for Reductions
- Cones of Various Lengths for Reductions
- Variac for Control of Light and Kelvin Output for Color Separations
- Electronic Timer
- Special Positive Interlocking Lens and Camera Motion
- Precision Reducing Negative Holders
- Vacuum Easel and Vacuum Pump

PARTIAL LIST OF USERS

Daily News
New York, N. Y.

Process Litho
Chicago, Ill.

Rochester Institute of Tech.
Rochester, N. Y.

Pringle & Booth, Ltd.
Toronto, Canada

C. F. Braun & Co.
Alhambra, Calif.

McCalls Magazine
Stamford, Conn.

Knapp Engraving
New York, N. Y.

Western Lithographing Co.
St. Louis, Mo.

Krug Litho Arts Co.
Kansas City, Mo.

San Francisco Police Dept.
San Francisco, Calif.

Commercial Printers
Columbus, Ga.

Courier Journal & Louisville Times
Louisville, Ky.

The Osborne Co.
Clifton, N. Y.

Eastman-Kodak
Rochester, N. Y.

Consolidated Vultee Aircraft Corp.
San Diego, Calif.

Dept. of National Defense
Ottawa, Canada

Wm. Becker Studio
New York, N. Y.

King Studio
Chicago, Ill.

Miami Herald Publishing Co.
Miami, Florida

Shorecor
New York, N. Y.

Army Chemical Center
Edgewood, Maryland



Write For Complete Literature

Headquarters for Professional Photographic Equipment Since 1920



J. G. SALTZMAN, INC.



SALES DISTRIBUTORS for CAESAR MANUFACTURING, INC.

480 Lexington Avenue, New York 17, N. Y.

Alexander Joins Gegenheimer

John A. Alexander, Jr. has joined William Gegenheimer, Co., Inc., Brooklyn, as sales engineer. Mr. Alexander formerly was conservation director at Republic Aviation Corp. In his new post he will coordinate all dealer activities on sales and service of Baldwin press washers and other Gegenheimer products.



Heath Business Continuing

Mrs. Lilian S. Heath, widow of Norman A. Heath, former president of Photo Litho Plate Graining Co., Baltimore, announced recently that her late husband's brother, Gilbert, now will run the business. She stated that helpful encouragement from the industry has helped make her decision to continue the business.

Mr. Heath, who died June 23, had been under the advice of his physician and had curtailed his activities.

Bingham Appoints Patterson

Kenneth Butler, vice president of Sam'l Bingham's Son Mfg. Co., has announced the appointment of M. D. (Pat) Patterson to the Chicago Sales Dept. of the Company.



ATF Elects Silliman V.P.

John V. Silliman, of American Type Founders, has been elected vice president in charge of operations, and a member of the board of directors.

Mr. Silliman has been with ATF for 20 years, being responsible for various phases of manufacturing operations, production and quality control, purchasing and product engineering.

Des Moines Co. Changes Name

The Des Moines Lithography Co. has been reorganized and its name changed to Lithographers, Inc., it was announced late last month by George R. Dean, president and general manager.

Harvey Inman, who has been in sales work for 30 years, has joined the new firm as vice president and

sales manager. Richard C. Hedke will continue as secretary.

The company, which specializes in color work, is expanding its floor space and adding new press equipment.

PIA Will Inspect Profits

An evaluation of the prospect of future profits will be the keynote at the 70th annual meeting of Printing Industry of America, Inc., Oct. 30-Nov. 1, at Hotel Statler, Los Angeles. The general theme for the convention

is designed to present information which will stem the decreasing trend of profits in the printing industry, PIA stated.

Included in the program will be an analytical presentation which will show why some companies make more profits than others. This will be an analysis of nearly one-quarter of the 654 firms who participated in the 1955 ratio Study who average 12 percent or better.

The Rotary Business Forms Section of PIA will meet Nov. 2.

**COPYRITE PLASTIC
RIGID LAYOUT SHEETS**
(Made from Vinylite)

54" x 77" — 54" x 120"

**THE ONLY RECOMMENDED SUBSTITUTE FOR GLASS—
WHERE YOU NEED ACCURATE REGISTER
"SAVE MONEY — CUT COSTS"**

• They're Cheaper • Safe Handling • Easier Storage
• Dimensionally Stable • Clear or Matte Surfaces • Non-Breakable
• All Sizes Available • Thicknesses, .003", .010", .015", etc.

Numerous stock sizes for all presses
Immediate delivery from stock

20" x 50"	40" x 51½"	51½" x 60"	51½" x 120"
26" x 36"	42" x 51½"	51½" x 70"	54" x 72"
30" x 51½"	40" x 54"	51½" x 72"	54" x 77"
36" x 48"	42" x 54"	51½" x 74"	54" x 78"
37" x 51½"	48" x 51½"	51½" x 77"	54" x 120"

New! OUR VALUTONE BLUEPRINT SOLUTION — IS NOW AVAILABLE

• Valutone Blue Print Powder • Static Eliminator Solution & Cleaner
• Opales & Brushes • Zinc & Aluminum Plates Grained & Ungrained
• Litho Stripping Glass • Black & Redlac Emulsions for Glass & Plastics
• Platemaking Chemicals • Ground Glass for Cameras & Layout Table

"Chromoline" for Color Proofs
Write for Catalog N (Samples and Prices) Today

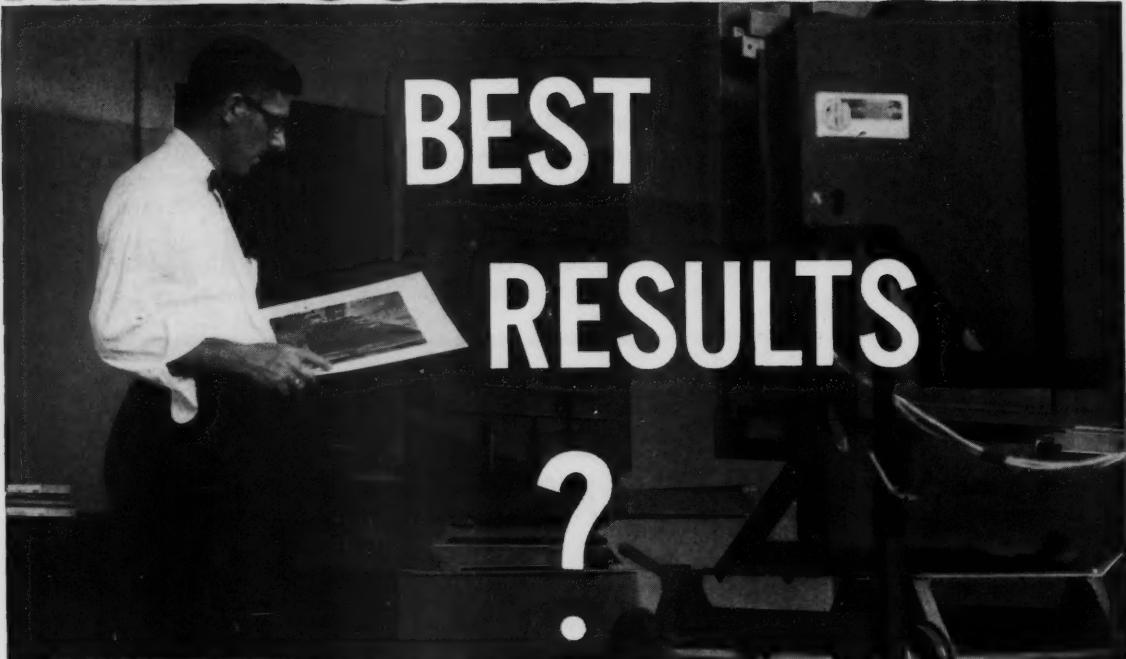
SENSATIONAL NEW LOW PRICE
ON ALUMINUM LITHOPLATE
All sizes . . . up to 58x77
Ungrained or Grained

SAVE UP TO 50% ← → SAVE UP TO 50%

N. TEITELBAUM SONS
INCORPORATED
MANUFACTURERS OF PLASTICS, PHOTO-GLASS
AND LIGHT ROOM EMULSIONS.

★ 261 GRAND CONCOURSE NEW YORK 51, N. Y.
Telephone: MOTt Haven 5-2050 ★

ARE YOU LOOKING FOR



GEVAERT

"Best results," says Mr. J. F. Daley, GEVAERT technical representative, can be achieved only with the best materials—so why not help insure best results for yourself with these fine GEVAERT products:

LITHOLINE 082: Standard base Ortho Film—its excellent contrast and etching qualities make this film unsurpassed for fine half-tone work.

LITHOLINE 081: The same as Litholine 082 only on ultra-thin base, making it invaluable for multiple overlays or reverse printing.

CORRECTONE FILM: For continuous tone negatives in photogravure and offset—eliminates retouching and masking.

LITHOLINE T PAPER: Translucent material particularly well suited for line copy, at lower cost.

For complete information about these and other fine graphic materials, write to the nearest branch today, and follow the swing to GEVAERT!

TRY THE BEST... USE THE BEST... GO GEVAERT!

THE GEVAERT COMPANY OF AMERICA, INC.

321 WEST 54th ST.,
NEW YORK 19, N. Y.

150 N. WACKER DR.,
CHICAGO 6, ILL.

6370 SANTA MONICA BLVD.,
LOS ANGELES 38, CALIF.

9109 SOVEREIGN ROW,
DALLAS, TEXAS

IN CANADA:
TORONTO 2-B, ONTARIO

Don't forget to see our booth at the National Lithographer's Convention in New York, September 19-22

BREVITIES

NORRIS F. CROSBY, a partner in Associated Lithographing, Inc., Des Moines, Iowa, recently was named chairman of the Polk county chapter of the American Red Cross.

ML

JOHN T. RENSHAW, vice president and Philadelphia office manager of E. P. Lawson Co., recently celebrated his tenth anniversary with the firm.

ML

NEELY PRINTING CO., Chicago, is adding 16,000 sq. ft. of floor space to its plant. The company engages in offset and letterpress printing.

ML

NORTH AMERICAN LITHOGRAPH, INC., formerly at 360 E. Grand Ave., Chicago, has occupied new quarters at 1322 S. Wabash Ave. The new location has 13,000 sq. ft. of floor area.

ML

THE ACE CARTON CORP. of California has installed a LSG two-color Harris offset press, 50 x 69", in its Puente, Cal. plant.

ML

U. S. PLAYING CARD CO., Cincinnati, reported gross income for the six months ended June 30 was \$2,036,827, and net income was \$986,697.

ML

PRINTERS SUPPLYMEN'S GUILD of Greater San Francisco has elected Alan W. Johnston of the Printwell Corp. as president. He succeeds Donald E. Leutz, Gane Bros. & Lane.

ML

VICTORIA PRINTING AND LITHOGRAPHING CO., INC., New York, recently was granted charter of incorporation listing capital stock of 200 shares, no par value.

ML

LITHOPATE, INC., division of Harris-Seybold Co., has opened a new warehouse in Richmond, Va.

ML

MANHATTAN LITHO CORP., New York, was granted charter of incorporation recently listing 100 shares of capital stock no par value.

ST. LOUIS GRAPHIC ARTS ASSOCIATION recently announced that 15 of its members will be included in the "honor roll" to be placed in the new PIA building in Washington.

ML

HOWARD F. HULVA, sales manager of Rodger Lithographing Co., Inc., Tulsa, Okla., has been named chairman of the publicity and promotion committee for the Community Chest-Red Cross campaign in Tulsa.

ML

ALFRED G. COSTA, treasurer and general manager, Superior Printers, Inc., Boston, was one of nine new members elected to the Boston Advertising Club recently.

ML

GORDON MONSEN, executive of Monsen, Inc., Chicago typographic trade firm, recently was chairman of a symposium which featured a unique observance of George Bernard Shaw's 100th birthday.

ML

PETER A. WARD, an estimator for Edwards & Deutsch Lithographing Co., Chicago, died July 19. He had been with the company 38 years until his retirement in 1953.

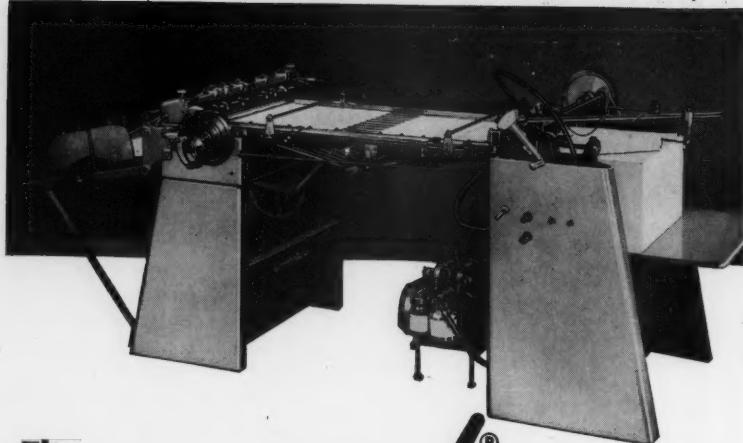
The Miehle
OFFSETS

True Rolling Cylinders
mean Better Quality...

All Miehle Offsets are built with the exclusive feature of True Rolling Cylinders. Developed by basic Miehle research, this feature assures a true rolling contact at the printing line, both between plate and blanket and between blanket and paper. The result... printing the true image without dot distortion, accurate print length, longer plate life, and elimination of paper stretching forces—all of which mean superior lithographic quality on every job.

Write for complete information

MIEHLE PRINTING PRESS AND MANUFACTURING CO.
CHICAGO 8, ILLINOIS



The

Rosback®

Automatic

Slot Perforating Machine

incorporates BOTH feeder and perforator

Now, for the first time, you can secure a fully automatic slot perforating unit which includes both perforator and automatic feeder built in its entirety by one manufacturer. With this Rosback machine, you are assured complete responsibility for satisfactory operation from a single source, because perforator and feeder have been designed and built as a team for most efficient production.

Here is a perforator which guarantees you high speed, accurate perforating

with high speed automatic feeding for profitable volume output.

A few of the important innovations which are incorporated in the Rosback Automatic Slot Perforating Machine are detailed in the box below. Compare your needs with these unusual advantages—you'll find your answer for meeting today's demands for accurate, high-speed slot perforating. For complete information, write for specification sheet or see your Rosback dealer.

OPERATING ADVANTAGES

Two sizes—30" and 36".

Speed—up to 12,000 per hour.

Feed Table accommodates 24" pile.

Handles stock from 9# manifold to post card weight. Minimum sheet size 6"x6".

Patented pile elevating mechanism extremely sensitive. One adjustment compensates for thick and thin stocks.

Safety disconnect switch stops feeder if pile is exhausted.

Double pump—one for vacuum, one for pressure. Vacuum and pressure regulated independently.

All air controls and stop-start switches directly in front of operator.

Special vacuum valve enables operator to switch quickly from strike to continuous perforating.

Tape section equipped with micrometer side adjustment and simple tape-tension adjustment.

Extension delivery and automatic jogger available as optional extra.

F. P. ROSBACK COMPANY • Benton Harbor, Mich.

WORLD'S LARGEST MANUFACTURERS OF PERFORATORS,
WIRE STITCHERS AND PAPER PUNCHING MACHINES

Litho Equip. Needed In India

One of the leading dealers in lithographic printing equipment in India has announced that a demand exists for second-hand and rebuilt machinery. Particularly in demand are single and two-color offset presses, flat bed litho machines, process cameras for photolithography, step and repeat machines (new and rebuilt), and offset plate graining machines.

Companies interested should send complete information to Pikay Co., P.O. Box No. 48, M.S. St., Sivakasi, S. India.

Sam'l Bingham Expands Plant

Sam'l Bingham's Son Mfg. Co., Chicago, is building a two-story addition to the Chicago plant. The first floor and basement space of the new addition will be used exclusively by the Samson Offset Blanket Division.

Kenneth Butler, vice president, said that the sales volume of their new blanket overloaded their present facilities and made the new addition necessary.

Cited For Medical Services

Recognition for complying with the standards for medical service in industry, as established and approved by the Industrial Medical Association, was given recently to five graphic arts plants.

Certificates of Health Maintenance were awarded by the Occupational Health Institute to Caspers Tin Plate Co., Chicago; Curtis Publishing Co., Philadelphia; R. R. Donnelly & Sons Co., Chicago; Fawcett-Dearing Printing Co., Louisville; and the *New York Times*.

Former Westvaco Officer Dies

Adam K. Luke, Palm Beach, Fla., for many years an officer of the West Virginia Pulp and Paper Co., died Aug. 8, following a long illness.

Mr. Luke had been treasurer and vice president of the paper company and later vice-chairman and honorary chairman. He had completed more than 60 years of service with West Virginia before he retired in 1950.

EARLY DAYS OF NAPL

(Continued from Page 91)

tion was available between plants and workers. The existence of this situation gave us the urge to form the NAPL.

Walter Soderstrom Joins NAPL

We enlisted the support of the outstanding manufacturers of chemicals and machinery to cooperate with us in an attempt to set up at least a few standards; in this we were successful. By this time also Walter E. Soderstrom had been discovered and began to lend his ability and time to building the NAPL.

He served in the early days on a very minimum salary basis, and this situation, as a matter of fact, did not improve very fast.

With an outstanding man like Capt. Montfort asking for no pay, and with a trained association executive like Walter Soderstrom giving his all on the basis that the association was needed, with generous contributions of time and effort by many early members, the new organization had the support that it needed to grow.

To Walter Soderstrom and the continuing line of fine presidents who have served the association goes much of the credit for the success of NAPL and the position of influence which it occupies in the lithographic industry today.

Our first group meeting was held at the Pennsylvania Hotel, New York, with George Loder presiding as president. About 25 persons attended. I was elected president

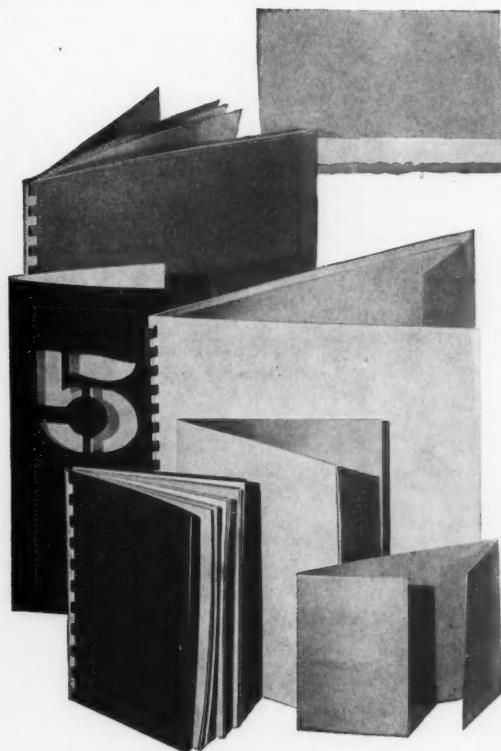
at that meeting and the following year our first full fledged convention was held in Atlantic City. During that year and before the Atlantic City convention, Walter and I set up what is now the clinic (Saturday Quiz) session of every NAPL convention.

Harvey Glover was the expert at the first quiz session who struck his neck out to answer the questions from the floor,—the first time in the history of the industry,—I believe, that anyone had the nerve to make the attempt. He did a fine job and contributed in a major way to the success of the program, though I heard later that he was criticized, as I was for giving away too much useful information.

Major Kirby presided at this first Quiz Session, interpreting the questions. This was rather important at the time, for in those days many of us did not even speak the same language lithographically.

About 50 owners of litho shops and their key employees attended this first clinic. The program has grown in a major way since then, and one of the results has been that our craftsmen are much better informed, and our product throughout the industry is more uniform in quality.

The rapid growth of the industry and the association since those early struggling years is widely known to present members of NAPL. It was through the free exchange of information and the cooperation and helpfulness of all the members of the group that this progress was possible. Much of the credit also must go to Walter Soderstrom, our very efficient executive vice president.★



CURTIS PAPER COMPANY

NEWARK, DELAWARE



CURTIS TWEEDWEAVE

for character

Distinctive is an unmistakable characteristic of this outstanding text paper. It has a handsome texture with a hand-made feel, a traditional deckle edge and superior surface sizing . . . all of these created for fine printing by letterpress or offset lithography.

Twelve rich colors and a soft, warm white, in matching text and cover weights, make Curtis Tweedweave an expressive background for your important printed material. Announcement cards, sheets and envelopes are available in white and all colors.

When quality and distinction are essential, call your paper merchant for sample books and layout size sheets of Curtis Tweedweave. He'll also supply made-up dummies upon request.

Remember . . . for character, use Tweedweave.

YOU START THE JOB — WE FINISH IT!

*For Accuracy and
Dependability*

For Service that is Sure

MONroe 6-2850

- ★ Die Cutting—Steel Rule Dies
- ★ Paper Coating—Varnishing, Lacquering,
Spot, Strip and Solid Gumming
- ★ Embossing
- ★ MOUNTED CARDBOARD DISPLAYS



119-125 NORTH PEORIA STREET

CHICAGO 7, ILLINOIS

Quality Finishers for the Printing and Lithographic Trades

HANCO **"KWIK"** ONE SOLUTION
PRESS KLEEN SOLVENT

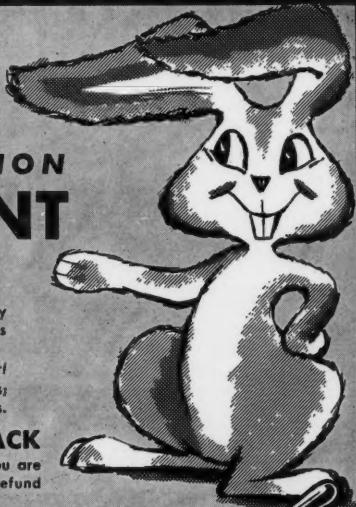
The ONE WASH-UP Miracle Liquid!



- Immediately disintegrates ink upon contact. Saves you money on every wash-up . . . reduces "press idle" time . . . speeds production.
- Eliminates several wash-up solutions. Cleans cleaner . . . faster!
- SAFE! Will not damage rollers or plates. No harmful, toxic fumes; has a pleasant odor. High flash-point meets safety requirements.

GUARANTEED . . . OR YOUR MONEY BACK

Order a gallon can today, only \$3.50 . . . try it on your presses. If you are not completely satisfied, return the unused portion and we will refund your money. Available in 1, 5, 30 and 50 gallon containers.



A. E. H A N D S C H Y c o.

Manufacturers of Fine Letterpress and Offset
Printing Inks and Pressroom Supplies

CHICAGO 7, ILL., 125 SOUTH RACINE AVENUE

MINNEAPOLIS 15, MINN., 422 S. THIRD ST.

INDIANAPOLIS 2, IND., 528 N. FULTON ST.

DISTRIBUTORS in All Principal Cities. Write for address of Distributor nearest you.

Harris Chemical Sales Merge

All sales operations and personnel of the Harris Chemical Division, Harris-Seybold Co., have been integrated with the nationwide organization of Lithoplate, Inc., wholly owned subsidiary of Harris-Seybold.

Announcement of the integration was made jointly by Elmer F. Deal, president of Lithoplate, and Joseph W. Powell, Jr., vice president, finance, of Harris-Seybold, and board chairman of Lithoplate.

Lithoplate now becomes the sole distributor of all products manufactured by the Harris Chemical Division. General offices of the subsidiary are located in El Monte, Cal.

PIP Plans Exhibition

Plans are underway in Philadelphia for the 1957 Printing Week Graphic Arts Exhibition, Jan. 13-19. Entries are invited from buyers of printing, designers, engravers, lithographers, advertising agencies, printers, typographers and binders. Closing date for entries is Nov. 19. Material printed in the Philadelphia area between Dec. 2, 1955 and Nov. 15, 1956, may be submitted. Entries are now being received by Philadelphia Printing Industries, Inc.

Correction

In the Acme Machinery Division insert facing page 117, the text in the left column describing the second and third machines has been transposed. The text below the second machine should be Tri-Cut Super 3-Knife Trimmer 13 x 20", and under the third machine should be A-112, 44" cutter up to 65".

Sun Chemical Names Two

Sun Chemical Corp. has announced that Donald Reed and Dennis Casey have joined the sales staff of its General Printing Ink Co. division as Eastern district representatives.

Mr. Reed will have offices in Long Island City, and cover New York, New Jersey, Pennsylvania and parts of Connecticut. Mr. Casey joins the Cleveland office of G.P.I., as his territory includes Ohio and parts of

New York, Pennsylvania and West Virginia. He was previously employed by Colgate-Palmolive-Peet Co.

Wolff Speaks at GAA Meeting

John M. Wolff, vice president of the Lithographers National Association, was scheduled to be the principal speaker at a joint luncheon meeting of the Graphic Arts Association of Washington, D. C., and the Advertising Club of that city, Sept. 11 in Hotel Willard. Mr. Wolff's topic was to be "Lithography's Future Role in American Business."

A past president of the Printing Industry of America, Mr. Wolff has been a director of LNA for 18 years and is presently serving as a member of the executive committee. In 1916 he established the Wolff Printing Co.

in St. Louis and in 1945 consolidated his business with the Western Printing and Lithographing Co.

Washington GAA also sponsored a one-day showing of the 270 winners in the 6th Lithographic Awards Competition and Exhibit.

Denver Firm Installs Harris LTG

Leonard Nielsen Lithographing Co., newly established litho plant at 1712 S. Broadway, Denver, Col., recently installed a L.T.C. Harris press. The new firm is owned and operated by Leonard and Mary Nielsen.

Brown Names Distributor

Megargee Bros., Scranton, Pa., have been appointed distributors in the Scranton area for L. L. Brown's line of papers.

**things are
DIFFERENT today**

...and so is LIGHT!

So don't be satisfied with the old bouncing, sputtering arc lamp which varied constantly in intensity and color.

Get the facts on the nuArc line of HI-LITE Arc Lamps. They are steady burning, inexpensive to operate and the cost is less than the old conventional type arc lamps.

The HI-LITE line have a newly developed and patented control.

Yes things are different today, especially in arc lamps, so find out at once how you can speed up your production and reduce your costs.

Contact your dealer
or write for bulletin 600 AP

nuArc
COMPANY, INC.
General Office and Factory:
824 S. Western Ave., Chicago 12, Ill.
Eastern Sales and Service: 215 Fourth Avenue, New York, N.Y.

Meyercord Company Opens New Los Angeles Decal Plant



The Pacific Coast division of the Meyercord Co., recently completed this \$400,000 Los Angeles plant for the manufacturing of decals by offset and screen processes. The company operates three other

Ahrenkilde Named To RIT Staff

Sven Ahrenkilde, a Danish civil engineer working in the graphic arts field, recently arrived in this country to join the staff of the Graphic Arts Research Division of RIT. He will be in charge of its photographic laboratory, primarily working with problems related to color reproduction.

Mr. Ahrenkilde has both a theoretical and a practical background in the graphic arts, being apprenticed at one of the oldest photoengraving

plants in the U.S., as well as subsidiaries in Mexico and Argentina, affiliates in Canada and Australia and licensees in Cuba, Venezuela, England, Spain, Italy, Austria and Israel.

firms in Copenhagen with the purpose of being a cameraman for photoengraving. Most recently he was employed at the laboratories of the Graphic College of Denmark until this spring.

Edward K. Innes Dies

Edward K. Innes, a partner in the printing firm of Innes & Sons, Philadelphia, died last month at his home in Primos, Pa. Mr. Innes was one of the founders of the firm in 1895.

Litho Sales Growing at H-S

Growing sales of lithographic printing presses, Harris-Seybold's principal product, have contributed substantially to the record earnings of the fiscal year ended June 30, said George S. Dively, chairman and president of the board.

In an announcement Aug. 23, Harris-Seybold reported that shipments and earnings reached new highs. Consolidated net shipments of the company and subsidiaries were \$42,546,577 for the year against \$37,123,877 in fiscal 1955. Net income for the latest 12 months rose to \$4,344,720, equal to \$4.40 a common share, compared to \$3,007,588 or \$3.96 a share a year earlier.

Mr. Dively said the company has continued to benefit by three growth trends, in color printing, in printed advertising and in the offset printing process. Color printing has more than tripled in the last decade, he pointed out, while printed advertising and lithography each have more than doubled.

Cut "Down-Time" Costs with

Here is an important new development in the deep-etch field that means dollar savings to you! Amazing SINVALCO Solution #24 makes it possible for you to coat and store your plates for days, longer in some cases, depending upon individual shop conditions. Now you can keep well ahead of the press room by maintaining a stock of coated plates on hand, ready for instant use at all times! Ideal for step-and-repeat work! Solution #24 assures high quality results on any standard

lithographic metal, including multi-metal. It develops more easily than other deep-etch coatings.

Just another reason why SINVALCO is America's leading supplier of litho chemicals. You can start cutting costs and saving dollars today . . . call your S&V representative!

THE LITHO CHEMICAL DIVISION OF
SINCLAIR AND VALENTINE CO.

Main Office & Factory: 611 West 129th Street, New York 27, N.Y.

OVER 35 BRANCHES PROVIDE SERVICE FROM COAST TO COAST

MODERN LITHOGRAPHY, September, 1956



Texoprint Available in Colors

Kimberly-Clark Corp., Neenah, Wis., has announced that Texoprint, formerly in only one color, now is available in four additional colors, four finishes and three weights. Texoprint is a plastic printing paper which folds, rolls, cleans easily, sews like cloth, and has a high degree of resistance to water, grease, oil, and some chemicals.

The plastic paper is used for printed materials which must withstand oil, grease, or water such as cookbooks, labels, signs and posters, and instruction manuals used in garages, workshops, laboratories, and engine rooms.

According to the company, Texoprint, while extremely durable, yields excellent fidelity of detail by either lithography, silk screen or line letterpress.

Souvenir Golf Book Issued

Officials of Chicago's printing industry took a busman's holiday in connection with their 5th annual Championship Golf Tournament held Aug. 28.

The graphic arts executives collaborated to turn out an attractive souvenir book which was distributed to the more than 400 persons participating in the annual event. Copies also were distributed to the Chicago area printing industry.

LTF
(Continued from Page 89)

trade trainers and are so organized as to require a minimum of supervision.

Backing up these specific training

materials, and stemming from constant research at the lab, coupled with frequent conferences, is a constant flow of publications. To date the Foundation has made available well over 100 publications on various aspects of lithography. Every old-line lithographer will remember the title—"Improvements in Deep-Etch Platemaking" which came out of the original Research Bulletin #214 "Deep Etch Platemaking by the Gum Process." And certainly everyone re-

members the original lithographer's bible—"The Albumin Process" which later became Research Bulletin #6 "The Albumin Process of Photo-Lithography."

It is worthy of note to realize that the lithographic industry is absolutely unique in all industry because it has a well-established, independent Research and Educational institution. Here is another sample of industrial uniqueness—a volume, produced by the industry, covering the actual chemistry of the process, and even this publica-



Positive Way To... Stop OFFSET!

WRITTEN GUARANTEE WITH EVERY INSTALLATION

- Get more, cleaner, impressions per hour
- Reduce reject sheet waste
- Completely automatic—accurate—dependable
- Easily adaptable to any type press
- Only one finger-tip setting for positive control
- Complete air operation . . . no moving parts

STOP OFFSET SPRAY MATERIALS

POWDERS—Compounded especially for anti-offset sprays. Pure vegetable compound—no minerals or grit. Free flowing and moisture resistant. Available in controlled particle sizes for any type work.

LIQUID—Available in light, medium, heavy, and extra heavy grades. Non-inflammable, non-toxic, non-abrasive. Won't freeze. Flows freely . . . non-settling.

WET SPRAY UNIT

NEW... CLEAN... LOW PRESSURE OMC LIQUID SPRAYER

True LOW PRESSURE • Easily adaptable • Adjustable Pattern • Definitely Cleaner

IMPROVED . . . to give Clean, dependable performance at true LOW PRESSURE . . . only a low 12 pounds air pressure required for full coverage spray pattern! All you do with an OMC Liquid Spray Unit is set it and forget it. Eight efficient models available for any size press, plus essential accessories for greater efficiency. Write for new, descriptive folder giving complete details.

ORTMAN McCAIN COMPANY
Specialists in Offset Stopping Equipment
1332 West Washington Blvd. • Chicago 7, Illinois

Miracle

MIR-A-PLATE

MIR-A-PLATE

MIR-A-PLATE

4 WINNING SOLUTIONS

Send for
GENEROUS
FREE
SAMPLES
AND PROVE IT
TO YOURSELF!

Here's the dependability you need for finest results on every plate making job! MIRACLE and MIR-A-PLATE Coatings and Solutions are guaranteed for uniformity, quality and complete product satisfaction. Electronically treated to kill bacteria—with stabilized dye content for smooth coating—reduced staging. Try them soon and enjoy easier working, sharper, cleaner printability and economy.

"Serving America's Plate Makers"

GENERAL PLATE MAKERS SUPPLY CO.

Main Offices & Plant: 5441-55 N. Kedzie Ave., Chicago 25

New York Office: 22 E. 17th St., New York 3

"Famous 5"

FILM & PLATE SUPPLIES

Complete stocks of Kodak, DuPont, Di-Noc, Ansco and Gevaert assure prompt shipment of the exact type and size you order. And our extra-fast deliveries can "save the day" in emergencies. All sensitized goods shipped freight prepaid to your plant (except west of Rockies).



Make this Label

IT REPRESENTS
High Quality
Skilled Union Labor
"Trouble-free" Service



YOUR buying guide

Our Association members are pledged to rigid standards in the interests of the Industry. For that very reason, your safest bet on re-grained plates or new metal is *The Plate That Bears This Label*. When you see it, you know you're looking at the best.

MERCURY LITHO PLATE GRAINING SERVICE

AMERICAN LITHO PLATE GRAINING COMPANY

AUTOMATIC PLATE GRAINING CORPORATION

LITHOGRAPHIC PLATE GRAINING COMPANY OF AMERICA, INC.

CITY LITHO PLATE GRAINING CO.

GRAPHIC PLATE GRAINING CORPORATION, INC.

WILLY'S PLATE GRAINING CORPORATION

MEMBERS OF THE

LITHOGRAPHIC PLATE GRAINERS ASSOCIATION, INC.

220 West 42nd Street

New York 36, N.Y.

tion has been included in the industry's training material.

In this library are Skilled-Craft Texts, Research Bulletins, Technical Bulletins, Informational Bulletins and several other special types of publications to meet every conceivable training, back-of-the-shop, and technical need from that of the new office boy to the most highly-trained technical man.

Time and Cost

It takes quite a while to write, produce, and distribute a book. The cost is rather high, and that is why revisions are slow in coming out. But to make new information available at the earliest possible moment, the Foundation's research department produces *Research Progress* several times a year. This is a most important service which serves to supplement our publications and help keep the library most useful between the issuance of new or revised publications. Along these same lines, and to demonstrate new techniques to our craftsmen, the Foundation stages technical forums. These, of course, are limited in number and any one lithographic center cannot stage one at closer intervals than several years.

However, to meet this need for demonstrating new techniques, materials or equipment, the Foundation embarked on a program of audio-visuals. All the plant or school needs is a relatively inexpensive kit of a record player and 35 mm strip-film projector. By combining the visualization of a film strip with a recording of a carefully written and edited script, it is possible to demonstrate to your craftsmen, right in the plant, these new developments. And, of course, trainees, whether in-plant or in school, also can learn.

To make the AV program even more effective, each audio-visual includes sets of supplementary discussion notes for those viewing the AV. Attached to one set of the notes is a program guide to help the trainer, or the person responsible for showing the audio visual in your plant or in a classroom. As a further aid, the notes usually include illustrations of points which, it is anticipated, may be raised by those viewing the

audio visual. In effect the AV is not just a 20-minute time killer or entertainment device. It is a complete training unit for up-grading your present craftsmen, or instructing your apprentices.★

OVERTIME

(Continued from Page 65)

pay such overtime costs as are necessary to produce his particular job.

One logical way to pass overtime

expenses along to customers is to set up and maintain a detailed record of all departmental hours of overtime together with costs for, say a six month or year period and then to include this total overtime cost in budgeted hourly rate computations so every job that goes through the plant will bear some small portion of this overtime burden.

Often it is impossible to bill a particular customer for overtime. Because of crowded schedules some jobs

**PERFECT
pH CONTROL
for your H₂O**

**BESCO
FOUNTAIN
SOLUTION**

Proper control of the fountain solution is one of the most important details of offset press work. With Besco Fountain Solution you are assured of perfect pH control. It keeps the plate desensitized, prevents roller stripping, gives good clean, sharp impressions. Can be used with zinc or aluminum. Try it in your presses today.

PRICES	
1 Gal	\$6.00
4-1 Gal.	\$6.00 less 5%
12-1 Gal.	\$6.00 less 10%
1 Qt.	\$1.75

**BRIDGEPORT ENGRAVERS
SUPPLY CO.**

BRIDGEPORT 2, CONN.



BOSTON—287 Atlantic Ave.
NEW YORK—525 W. 33rd St.
CLEVELAND—1051 Power Ave.
CHICAGO—900 N. Franklin St.

develop overtime costs which are necessary. This cost can best be recouped if it is spread over all the departments in the shop.★

NAPL

(Continued from Page 55)

dation; *Jack Vellers*, Remington Rand.

Friday, Sept. 21

MORNING

QUALITY CONTROL MOVES AHEAD

Stanley R. Rinehart, manager,

printing division, E. I. du Pont de Nemours & Co.

COLOR CORRECTION IN PHOTO-MECHANICAL REPRODUCTION

Dr. Walter Clark, Eastman Kodak Company.

SUPERVISING IN THE LITHOGRAPHIC INDUSTRY

George A. Mattson, exec. dir., Chicago Lithographers Association.

AFTERNOON

ROUND TABLE ON SMALL OFFSET DUPLICATING

Presiding: *James S. Wilkinson*,

lithographic consultant. Others: *G. W. Bassett*, Miehle Printing Press & Manufacturing Co.; *George A. Cameron, Jr.*, president, Princeton Polychrome Press; *Richard Dowley*, Addressograph Multigraph Corp.; *Michael Golde*, president, The Michael Press Corp.; *George J. Hart*, supervisor, Reproduction Department, Shell Oil Co.; *James F. Horan*, printing department manager, J. J. Newberry Co.; *William Karr*, duplicating service supervisor, New Jersey Bell Telephone Co.; *William Moran*, Davidson Corp.; *William Myles*, sales representative, American Type Founders; *Kenneth Dorman*, editor, Offset Duplicator Review.

ROUND TABLE ON PRESSES

17" x 22" AND LARGER

Presiding: *Bernard S. Rosenstadt*, Ardlee Service. Others: *Ralph Randall*, Harris-Seybold Co.; *William J. Stevens*, Miehle Printing Press & Mfg. Co.; *Harold Gegenheimer*, William Gegenheimer, Inc.; *Charles Staudaker*, American Type Founders.

ROUND TABLE ON PREPARATORY PROCESSES INCLUDING CAMERA, CORRECTION, STRIPPING AND PLATE MAKING

Presiding: *William H. Falconer*, Eastman Kodak Stores, Inc. Others: *Bernard R. Halpern*, Photo-Mechanical Consultant; *John E. Morse*, Brett Lithographing Co.; *George Hammer*, Forbes Lithograph Co.; *Lewis Feder-mack*, Daniel Murphy & Co., Inc.; *Walter Kaiser*, Edward Stern & Co.

ROUND TABLE ON COPY PREPARATION FOR OFFSET REPRODUCTION AND LINE ART

Presiding: *Walter Conway*, president, Walter Conway & Associates. (Panel to be completed).

The annual dinner dance and entertainment will be held in the Grand Ballroom, at 7 P.M. Dress, business clothes.

Saturday, Sept. 22

ALL DAY TECHNICAL SESSION FOR LITHOGRAPHIC EMPLOYEES AND EMPLOYERS

Presiding: *William J. Stevens*, Miehle Printing Press and Manufacturing Co. Panelists: FILM-CAMERA—

in your **CAMERA** in your **DARKROOM**

NATSCO MEANS BETTER LIGHT!

NATSCO
OVERHEAD COLD CATHODE
DARKROOM SAFE LIGHT

ONLY \$58.00

NEW NATSCO "HI-INTENSITY" LIGHT!
The ideal source of highly actinic
cool
clean
even and steady
Light
. . . for color
separating
for screening,
for duplicating
in the camera

Range of Sizes,
Prices on application.

NATIONAL STEEL & COPPER PLATE COMPANY

700 South Clinton Street
Chicago 7, Illinois

653 Tenth Avenue
New York 36, New York

— A COMPLETE LINE FOR THE GRAPHIC ARTS —

H. Potts, technical representative, Eastman Kodak Co.; **PAPER**—*A. P. Reynolds*, S. D. Warren Co.; **PRESS**—*Joseph Medio*, pressroom foreman, Brett Lithographing Co.; **INK**—*Richard H. Scott*, director of technical service, Sinclair & Valentine Co., **TECHNICAL**—*Michael Bruno*, research manager, Lithographic Technical Foundation.★

COLOR APTITUDE

(Continued from Page 74)

color judgment, that other factors, such as basic mental aptitudes and job or trade skill and experience in correcting color variations once identified and evaluated, become major considerations provided a "tolerable" or "permissive" level of color aptitude exists.

From the analysis presented above the following tentative conclusions are drawn:

1. By use of the test we can differentiate between employees or applicants in terms of their color matching and discrimination skill or potential.

a) A person with a "satisfactory" or better test score is quite likely to be more proficient in practice than one with a score of "doubtful" or less.

b) There is, on the other hand, no clearly demonstrated reason to prefer a person with a "good" score over one with a "satisfactory" score, although in a large sample or with an even more accurate supervisory rating technique this might prove to be the case.

2. For those jobs in which definite color aptitude, by expert job analyses, is required of an applicant, a uniform minimum cut-off score of "satisfactory" appears desirable despite a theoretical variation, by job classification, drawn from the job analyses.

a) However, in the case of dot etchers a "doubtful" score need not disqualify an applicant provided his other qualifications are strong, and the same may hold for provers.

b) Contrariwise, for ink matchers, quality control color passers and supervisors, while a "good" score

is probably preferable to a "satisfactory" one, the lower score need not disqualify.

3. This test can improve the battery of psychological aptitude tests used by Forbes as part of its full procedure for progressive screening of employment applicants or candidates for advancement and transfer.

4. On the other hand, only additional experience with the test within this company, and we hope, throughout the industry, will verify, modify or disprove our initial conclusions and pin point its usefulness. Here at Forbes we intend now to extend the test experimentally to offset, letterpress and gravure pressroom personnel. We would also like to give

further attention to test-score variability, by re-testing a sample of employees, and to score-level variations among the four colors used.★

CRAFTSMEN

(Continued from Page 58)

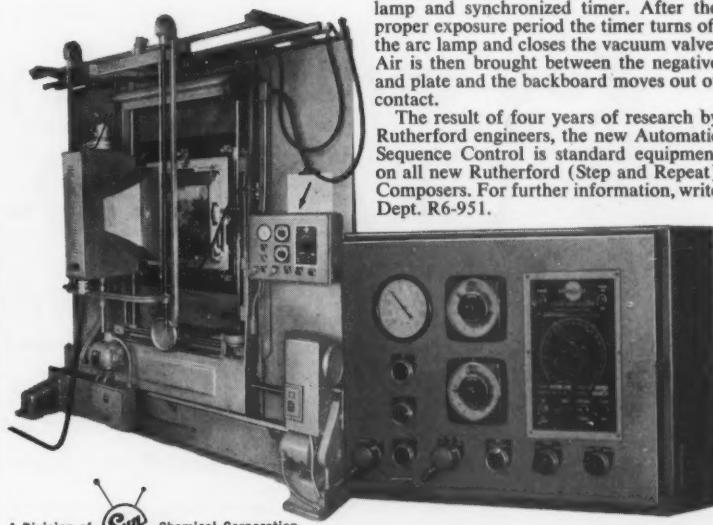
sify, or effect drying of ink. You can't expect the same print qualities from papers of different brightness, opacity, or smoothness. . . . Precautions to be taken to protect paper in the litho shop are: Allow time for the paper to adjust to pressroom temperature; test the paper with the sword hygrometer to find if it is too dry or too moist; Condition sheet paper that is too dry or too moist

Simplify exact photo composing with Rutherford's new Automatic Sequence Control

You'll get more consistent results and greater accuracy with the newly developed Automatic Sequence Control on Rutherford photo composing machines. And these results are possible even with recently trained operators because operation is simple and exact! Controls are located in one panel, and the operation is automatic.

After the correct lineal position is obtained, pressing one button sets off this sequence: the backboard moves into position and the vacuum valve actuates the arc lamp and synchronized timer. After the proper exposure period the timer turns off the arc lamp and closes the vacuum valve. Air is then brought between the negative and plate and the backboard moves out of contact.

The result of four years of research by Rutherford engineers, the new Automatic Sequence Control is standard equipment on all new Rutherford (Step and Repeat) Composers. For further information, write Dept. R6-951.



A Division of  Chemical Corporation

Rutherford Machinery Co.

10th Street & 44th Avenue
Long Island City 1, N. Y.

DIVISIONS OF SUN CHEMICAL CORPORATION

HORN (paints, maintenance and construction materials, industrial coatings) • **WARWICK** (textile and industrial chemicals) • **WARWICK WAX** (refiners of specialty waxes) • **RUTHERFORD** (lithographic equipment) • **SUN SUPPLY** (lithographic supplies) • **GENERAL PRINTING INK** (Sigmund Ullman • Fuchs & Lang • Eagle • American • Kelly • Chemical Color & Supply Inks) • **MORRILL** (news inks) • **ELECTRO-TECHNICAL PRODUCTS** (coatings and plastics) • **PIGMENTS DIVISION** (pigments for paints, plastics, printing inks of all kinds) • **OVERSEAS DIVISION** (export) • **A. C. HORN COMPANY, LIMITED** (Canada) • **GENERAL PRINTING INK CORPORATION OF CANADA, LIMITED** • **FUCHS & LANG de MEXICO, S. A. de C. V.**

SERVICE PLUS QUALITY!

HAS MADE OUR PLANT THE WORLD'S FINEST

We Specialize in All Sizes
MULTILITH and DAVIDSON PLATES



All Sizes ZINC and
ALUMINUM PLATES
Ungrained-Grained-Regrained

Lithographic Plate Graining Company
of America Inc.

35-51 Box Street

Tel. EVergreen 9-4260-4261

Brooklyn 22, N. Y.

You ought to try... GRAPH-O-PAKE

A smooth, concentrated opaque that you will find easy to work with. It covers well and is easily applied. Graph-O-Pake's quick drying qualities help speed up your operations. Order a trial 2 oz. jar today and see for yourself why more and more lithographers are switching to Graph-O-Pake.

SCIENTIFIC LITHO PRODUCTS CO.

2811 Philmont Ave., Huntingdon Valley, Pa.

ALSO MANUFACTURERS OF DUBELIFE WATER FOUNTAIN ETCH, PRESSMAN'S PLATE ETCH,

before attempting to run color process work. . . ."

"INKS OF TODAY AND TOMORROW." By Dr. Maurice Adler, California Ink Co., Berkeley, Calif.:

" . . . The trouble today is that people take printing and printing inks for granted. . . . We do not realize the long history which preceded the present products. . . . Each new development in inks brings along corresponding new developments in printing machinery. Today's inks are not good enough.

"What should an ideal ink be? An ideal printing ink is one which will dry instantaneously on any stock without drying on the press; have complete resistance to rubbing, marring and scratching; will not change in viscosity or tack with changes of temperature; take overprinting regardless of time between colors; take a varnish, take a glue or paste; and other qualifications. A new and improved lithographic gold ink is needed; one with brilliance and which will not pile up. . . . We need three-color process inks with the brilliance and clarity of the pure theoretical colors of the spectrum.

"There is a new process of printing now in development. Patents have been granted. This is a combined venture of the equipment and ink industries. By this method a special ink is distributed on a hot printing plate. The ink transfers completely to the paper in a dry state, and none remains on the plate.

"DESIGN FOR TODAY." By Merle Armitage, art director, *Western Family* magazine, Los Angeles:

" . . . Perhaps the greatest advance that has been made in modern merchandising has been in packaging. Packaging means more than just a container—it means appearance, sales appeal, design. Printed matter cannot escape the enlightened current trend of this packaging. . . . Advertising agencies with their staffs of expert copywriters and art directors turn out advertisements for our magazines, newspapers, direct mail and billboards which have given us the greatest mass sales in history. . . . Good design of printing as well as almost everything else that can be purchased

today has made the mass public susceptible to good design. Let us keep our high standards of printing, and let us not forget that typography and design will be the deciding factors in complete communication."

George Wise, Cleveland lithographer, was elected president of the group. Ferd Voiland Jr., state printer of Kansas, is vice president, and Mark Carrothers and Pearl E. Oldt, continue as treasurer and executive secretary, respectively.★

ART TECHNIQUES

(Continued from Page 53)

the drop-out accurately, it completely eliminates tedious hand opaquing and the possibility of human error.

[Note: When making combination line and halftone negatives with an engraved screen, it is necessary to use a screen compensator when shooting the line negative. With the two-step technique from Bourges copy, most users report that satisfactory register of the mask is obtained without screen compensation. Whether or not screen compensation will be necessary depends entirely upon the thickness of the glass screen used. This point can be quickly established by the first test shots. With contact screens the compensator is not required.]

In the two-stage technique, it is important that the film used have the characteristics necessary to produce the desired results in both negatives. Experience has shown that a film which is ideal for the normal halftone may not be contrasty enough to produce a satisfactory mask. The reverse also is true in other cases.

The following chart lists a variety of films and the applications for which they are most satisfactory.

It should now be evident that the Bourges Process involves no photographic operations not already known and practiced in lithographic camera departments. Briefly summarized, the two-step procedure requires shooting a normal, full-scale halftone negative and a separate drop-out mask from each of the copy elements. The accu-

Stickin' Around with KLEEN-STIK

KLEEN-UP MAN for your team

Customers' batting average down? Get 'em to put KLEEN-STIK in their promotion line-up! This versatile, pressure-sensitive adhesive on their P.O.P. will score high for their products at the cash register. Here, for instance, are a few recent hits produced with KLEEN-STIK:



Again, versatile KLEEN-STIK makes the "outstanding" difference! In this unusual vertical adaptation of the SLIDE-STIK, die-cut headlights "pop-out" of the T-shaped display to help GENERAL MOTORS' dealers introduce "T-3" Sealed Beam Headlamps. In showrooms and service departments across the country, thousands of these attention-getting 3-D displays were easily mounted by their two KLEEN-STIK Strips to walls, parts counters, etc., to sell "More Light—Aimed Right". Created by MODERN DISPLAYS, INC., of Detroit, KEN RANDALL directing. Swell 3-color print job supervised by WILSON BRICE of LITHO-ART, INC.

OLD FORESTER Points the Way



One quick strip of KLEEN-STIK makes this slick trick effective. Die-cut shelf press-on points out and points up BROWN-FORMAN's new, re-designed registered label for famous OLD FORESTER. The red pointer goes up easy, sells hard, carrying the promotion right down to the P.O.P. (Pin-Point of Purchase). Created and produced by FETTER PRINTING COMPANY, Louisville, under the eye of V-P BILL TURNER . . . with Ad Mgr. PEYTON HOGUE and C. R. BALLARD carrying the ball for BROWN-FORMAN DISTILLERS.

Let KLEEN-STIK "go to bat" for your customers — it's a sure hit every time! On window signs, shelf edgers, 3-D pieces and many others, K-S delivers a strong sales pitch with a change of pace. "Scout" the samples in our big free "Idea Kit" — write for yours today!

KLEEN-STIK PRODUCTS, INC.

7300 West Wilson Avenue • Chicago 31, Ill.

Pioneers in Pressure Sensitive to the Trade

MAKERS OF THE
FINEST QUALITY COLOR PLATES
FOR
OFFSET
LITHOGRAPHY

THE
STEVENSON
PHOTO COLOR SEPARATION CO.
400 PIKE STREET
CINCINNATI 2, OHIO

Schultz

DEEP ETCH CHEMICALS

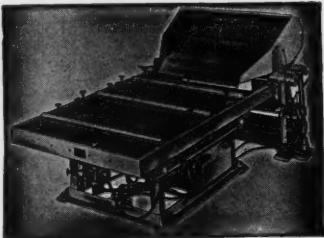
Leading litho plants have
been standardizing on
Schultz Chemicals for
over a decade.



1240 W. Morse Ave., Chicago 26, Ill.

SCHULTZ DEEP ETCH CHEMICALS

CRISP-VELVET-GRAIN



35 years' experience graining plates that
please both platemaker and pressman

All sizes ZINC and ALUMINUM PLATES

Ungrained — Grained — Regrained

WILLY'S Plate Graining Corp.

34-12 10th Street
Long Island City 6, N. Y.
Phone RA 8-1526



Member, Lithographic Plate Grainers Association, Inc.

A Complete Service to the Offset Printer

OVER 28 YEARS
SERVICE TO
LITHOGRAPHERS

COLOR CORRECTED
NEGATIVES, POSITIVES,
BLACK AND WHITE
DEEP ETCH, ALBUMEN
MACHINE MADE PLATES

EVERY JOB GIVEN
EXACTING CARE
AND SUPERVISION

THE PHOTO LITHO PLATE COMPANY
113 ST. CLAIR AVE., N. E., CLEVELAND 14, OHIO

TELEPHONE CHERRY 1-7442

FILM CHART

	HALFTONE NEGATIVE	HIGHLIGHT NEGATIVE (line)
AnSCO	Reprolith Ortho.	Reprolith Ortho.
EASTMAN	Kodalith Ortho., Type 2	Super Kodalith Ortho.
DU PONT	Photolith Ortho. A.	Photolith Ortho A.

racy and balance of the halftone negatives are checked and controlled by means of the tone scales.

Regardless of the nature of the work being done, the lithographic platemaking operation should be rigidly controlled to produce printing images on the plates that duplicate the tone values of the negatives or positives. The nature of the platemaking process itself does not tolerate variations in treatment to alter tone values. When this is attempted, the printing quality and durability of the image inevitably suffers and some form of tone distortion nevertheless occurs.

If the proper tone values have been established in the negatives or positives there is no reason for a platemaker ever to deviate from the standard technique except to compensate for such variables as fluctuating light strength, coating thickness, temperature and humidity, etc. A desirable technique should consistently produce printing images that are a facsimile of the halftone from which they are made. The non-printing areas should have the highest water receptivity and the printing images should be highly ink receptive and extremely durable. Once such a procedure has been established it can be maintained from plate to plate by suitable controls. One such control is the LTF Sensitivity Guide which, if printed on every plate, gives a visual check on the character of the plate.

If properly made, the four negatives from Bourges copy have a balanced relationship which must be maintained in platemaking. Except for necessary compensations, as explained above, the four plates should be given identical treatment.

In creating the artwork, the artist has produced a balanced set of copy elements. The tone range and gamut of colors seen in the artwork definitely can be duplicated with paper and ink — this is an inherent feature

of the Bourges Process. The pigments used in the overlay sheets are the same as used in printing inks (and can be matched), and the brightness range (tone scale) is well within the limits of the printing processes. Assuming that the photographic and platemaking operations have achieved an accurate conversion of the copy values, it is up to the pressman to achieve and maintain these values on the press.

The first requisite is to print with a set of inks which match the overlay colors as closely as possible. Secondly, the press should be adjusted and run so that the values on the plate are accurately transferred to the paper. A loss or gain in dot size, with attendant distortion of the tone scale, will upset the final balance and result in an unsatisfactory reproduction. Finally, the ink film densities should

be matched to the heaviest tone in the copy elements.

A very practical means of comparing the quantity of ink on a press sheet with the copy or with another proof is the "color bar." This is a narrow strip of solid density, and one or two tint values, running parallel across each plate at the extreme edge of the sheet. If the inking and impression are satisfactory, the solid line will be of the correct density and uniformly covered. At the same time, the tint values would be open and of the correct dot size. In addition, the results should be uniform for the full length of the bar. Any deviation from the accepted standard would indicate improper inking, excessive or inadequate pressure, imbalance of water and ink, etc. The most accurate visual comparison between press sheet and Bourges copy is obtained when the color sequence of the printing follows that of the artwork namely, black first, followed by yellow, red (magenta), and blue (cyan). If other press sequences are used, then



Finest Hydro-Pressed Plastic Sheets

VINYL—ACETATE—POLYETHYLENE—BUTYRATE—P.V.C.

SPLCORP is recommended as the only dimensionally stable substitute for glass, when Stripping Positives or Negatives for Multi Color Work, if close registration is desired. A few advantages enjoyed by the Lithographic Craftsman when using SPLCORP sheets are: Easy Handling, Increased Production, Job Assurance, No Breakage and No Storage Problems.

SPLCORP is manufactured in thickness ranging from .005" to .1", and is available in Transparent, Translucent, or Opaque, with either a Mirror Polished or Matte Finish on one or both sides.

SCRANTON PLASTIC LAMINATING CORP.

Laminating • Press Polishing



3218 PITTSSTON AVENUE PHONE DI 2-0407. SCRANTON 6, PENNSYLVANIA



use

Mallinckrodt®

lithographic chemicals

The proof of their advantages is in their performance.

- GUM ARABIC FLAKES • ALBUSOL®
- AMMONIUM DICHROMATE PHOTO
- ALBUMEN EGG SCALES • HYPORICE® • PICTOL®
- HYDROQUINONE • PICTONE®
- LITHOTONE® • JIFFIX®

MALLINCKRODT CHEMICAL WORKS

Mallinckrodt St., St. Louis 7, Mo. • 72 Gold St., New York 8, N.Y.
CHICAGO • CINCINNATI • CLEVELAND • DETROIT
LOS ANGELES • PHILADELPHIA • SAN FRANCISCO
In Canada: Mallinckrodt Chemical Works, Limited — Montreal • Toronto

Send for free catalog and further information today.

LICK STATIC
Permanently!

with Herbert
OXY COLD
BARS!

Static is a serious problem in every plant . . . but, it can be completely knocked out . . . quickly and at low cost, with the Herbert Oxy Cold Bar!

This easily installed, completely efficient device, eliminates Static, instantly and permanently. Absolutely safe and guaranteed to operate properly on all materials. Ends slow-downs and production delays caused by static.

Can be easily installed on any machine, old or new, and then pays for itself through improved production, more operating profit. Low in cost, high in efficiency. Send us specifications of your machine for full information and our proposal.



HERBERT PRODUCTS INC.

74-38 JAMAICA AVE. • WOODHAVEN 21, N.Y.

Are all the key men
in your litho shop

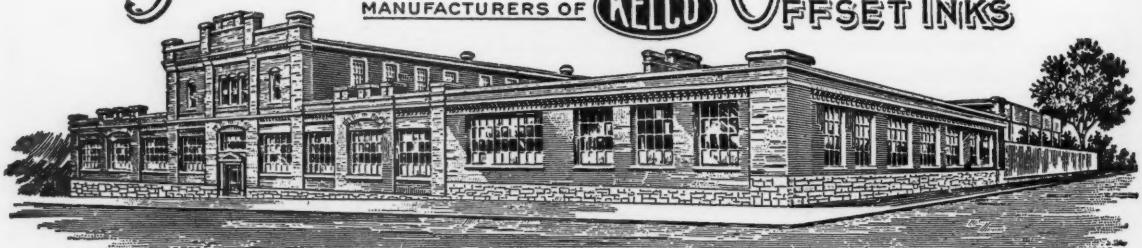
reading

ML

every month ?

If not, enter a
subscription now!

Joseph F. Kelly, Inc. Saint Louis
MANUFACTURERS OF KELCO OFFSET INKS



the colored overlays should be superimposed and checked following the color order on the press. When the pressman follows these few simple rules he will be able to achieve a reproduction that closely matches the original.

Summary

There can be no doubt that the graphic arts industries have achieved a high level of quality in four-color process printing. With the public becoming more and more color conscious, the volume of color printing certainly will increase. For economic reasons, four-color process cannot satisfy the needs of all existing and potential users of color printing. Current trends indicate that simplified color systems such as the Bourges Process, the Kodak 3-color Process, and others, are necessary to meet the demands of the expanding color market.

A system such as the Bourges Process is not a substitute for four-color process. It is, instead, a method that has a definite and unique place in the color reproduction field. It offers both client and lithographer many distinct advantages. To the lithographer already engaged in color reproduction, it expands his market. To others it will provide the means for breaking into color with existing equipment and personnel.★

The author gratefully acknowledges the assistance of Jean Bourges Mayfield, of the Bourges Color Corp., who verified the technical data and provided the illustrations.

PHOTO CLINIC

(Continued from Page 103)

only the extreme highlight tones. The combined treatment has the effect of accentuating the highlight tones. The extent of the "jump" or separation between the light tones and the highlights can be controlled by the ratio of the two exposures.

In lithography, the "Correctone" film could be used to replace the negative-and-mask combination conventionally used when making "drop-out" halftones. A continuous-tone

subject would first be copied on "Correctone" film and from this a drop-out halftone positive could be made. This system obviously eliminates the problems associated with making and registering the drop-out masks.

LETTERS

(Continued from Page 43)

facturer of the Welch Densichron? We would appreciate this information very much.

*Randolph T. Ode
Providence Lithograph Company
Providence, R. I.*

The Welch Densichron is manufactured by W. M. Welch Manufacturing Co., 1515 Sedgwick St., Chicago 10.—Editor.

Storage Building Plans

Dear Sir:

We would like to obtain a drawing or rough sketch showing general arrangement of an out-building used for storage of approximately 60 barrels of inflammable liquids (lacquers and coatings) required to serve a metal decorating line consisting of one-color press, coater and 120 ft. length oven. This storage building should also provide space for mixing purpose.

Do you have such a sketch or drawing among your files and, if not, can you inform us where we might obtain same?

We are about to construct a storage of this kind and wish to arrange same to effect maximum efficiency in a minimum area.

*A. W. Reichert
Sterling Seal Co.
Erie, Pa.*

We have no sketches or drawings of out-buildings for storage of inflammable liquids.

However, I think that you can get help from two places:

1. The National Fire Protection Association, 60 Battery March St., Boston 10, Mass., who publish booklet No. 30 "Flammable Liquids." This organization is called upon in many parts of the country to set up standards for handling flammable liquids and for giving advice on other hazards.

2. The Factory Insurance Association, Hartford, Connecticut also has a booklet on flammable liquids which is available now. I understand that FIA is a cooperative group of factories that have united to get higher protection.

If neither of these two places can provide you with the information you need, I would suggest that you contact one of the suppliers to the trade. Perhaps they can be of help in discussing the mixing area.—Editor.

NUTRAN PRODUCTS

- Retouching Dyes which lay evenly, penetrate easily into the emulsion and are fast to light.

Neutral Grey

Red

and special shades which are close to silver densities, #333 #444, Neo.

- Retouching Dye Remover.

- Staging lacquers for liquid masking.

Overlay Lacquer Cutting Lacquer and Thinners

- For easier stripping.

Quicktone

- Opaques, which flow well, leave thin film. Do not crack nor peel.

Black, Red

Water Soluble

Alcohol

Turpentine

- Electronic Control Equipment.

Densitometer,

Reflection Meter, Timer

- Selvyt Cloth — lint free for dry polishing of screens and lenses.

Plexiglas Trays

11 x 14, 14 x 17, 16 x 20, 20 x 24, 20 x 30, 22 x 28, 30 x 40

Request Technical Data

HENRY P. KORN

5 BEEKMAN STREET
NEW YORK 38, N. Y.
RECTOR 2-5808

For the
finest offset
reproduction
from any art...



• 817 WEST WASHINGTON BOULEVARD

1898

USE *JO*
COLOR
OFFSET
POSITIVES

CHICAGO 7, ILLINOIS, MONROE 6-7080

* Free Van Gogh print, suitable for framing. Send your name on your company letterhead.

Operation of the Offset Press
by Theodore F. Makarius

A 254-page practical reference book on operation of modern offset presses with special chapters devoted to paper conditioning, inks, varnishing, drying, storage of plates, and other subjects of interest to the offset pressman. An ink Problem Reference Chart lists 28 of the more common problems, how to identify each, and the possible cause and remedy.

More than 50 pages of case histories are given with solution to press problems outlined. Eighteen illustrations, some in full-color in the chapter on inks, are included.

Mr. Makarius, who is with Pope & Gray, Inc., Clifton, N. J., also is the author of ML's Production Clinic.

The book is lithographed with a flexible, green, leather-like, pebble grain cover, \$10.00 per copy.

Modern Lithography
Box 31, Caldwell, N. J.

Enclosed is payment. Please send "Operation of the Offset Press."

Name

Street

City, Zone, and State



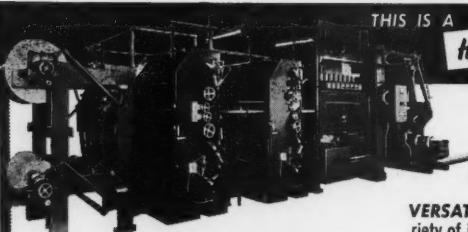
Stabilized
GUM ARABIC
Solution 14° Be.

The
Road
To
Better
Lithography

Ask your dealer or write direct

VARN

Products Co., Inc.
26-15 123rd St. Flushing 54, N. Y.



THIS IS A

HANTSCHO

ROLL FED LITHO PRESS

THAT CUTS YOUR PRODUCTION TIME & COSTS!

FAST! Up to 20,000 I.P.H.! Designed in multiple as well as perfecting units for exceptionally high speeds and volume production.

ECONOMICAL! In addition to the huge savings because of production speeds, your paper in rolls costs less than paper in sheets!

VERSATILE! Hantscho presses can be made in many combinations and sizes to print a great variety of items: Designed for multiple units—with folders, sheeters, rewinders or other special equipment, these high speed presses are in use throughout the U. S., producing magazines, newspapers, color work, catalogs, business forms, playing cards, calendars and many other specialties.

WRITE, WIRE OR 'PHONE—MOUNT VERNON: MO 7-8200, MO 4-9080—CHICAGO: DE 7-3392

GEORGE HANTSCHO CO., INC.
Formerly Graphic Arts Machinery, Inc.

Office & Plant: 602 South 3rd Ave., Mt. Vernon, N. Y.
Midwest Office: 153 West Huron St., Chicago 10, Ill.



Local Buyer's Guide

Look for the leading local suppliers in your area here.

Advertising rates in the Local Buyer's Guide are: \$7.50 per column inch, maximum 3 inches. Please mail copy and check or money order to Modern Lithography, P. O. Box 31, Caldwell, New Jersey.

CINCINNATI

EASELS

Carried in stock all sizes from 3½ to 18 inches—single and double wing. Will quote on any special designs.

THE DELMAR PAPER BOX CO.
419 W. Fifth St. Cincinnati 2, Ohio

NEW YORK

DISTRIBUTORS FOR —
**ST. LAWRENCE LITHO
COATED PAPERS
AND**
**ST. LAWRENCE OFFSET
(CARRIED IN STOCK)**

Cross Siclare & Sons, Inc.
207 THOMPSON ST., N.Y.C.
AL 4-9760

OFFSET PRINTING TO THE TRADE
Don't turn away long runs of a small sheet or short runs of a large sheet.

MAXIMUM SIZE 42x58
Call GRAMERCY 7-6100 JOE LOCASCIO
N. Y. LITHOGRAPHING CORPORATION
52 East 10th Street New York 3, N. Y.

HERBERT P. PASCHEL
Graphic Arts Consultant

Methods Analysis In-plant Training
Trouble-Shooting Color Correction Systems
118 East 28th St.—New York 16, N. Y.
MURRAY HILL 6-5566

PHILADELPHIA

You Can't Go Wrong

An unusually complete line and large inventory, plus intelligent handling and prompt attention, will eliminate your supply headaches.

EVERYTHING
FOR THE
GRAPHIC
ARTS

Films
Chemicals
Equipment
Accessories
Specialties

PHILLIPS & JACOBS
MANUFACTURERS
618-622 RACE ST. PHILADELPHIA 3A
428 RACE ST. NEW YORK 16, N. Y.
428 RACE ST. BOSTON 10, MASS.
428 RACE ST. CHICAGO 1, ILL.

READING ML ON BORROWED TIME?

If you are reading *Modern Lithography* on borrowed time, as it is routed around the shop, why not make sure you get it first and get to keep it for later use at home in your spare time.

You can, simply by subscribing for one year at \$3. And you can save a dollar by sending \$5 for two years. That way, you can take your time reading all the articles and late news every month.

Todd Consolidates With Hadley

The Todd Co., Rochester, N. Y., check printing firm, has announced completion of a move to consolidate the Chas. R. Hadley Co., Los Angeles, business forms printers, as a manufacturing and sales division of Todd. Both firms are wholly owned subsidiaries of the Burroughs Corp., Detroit. The combined organizations will have more than 3,000 employees and anticipate total sales of more than \$30 million this year, George L. Todd, president of both companies said.

Technicolor Buys Pavelle Color

The assets and business of Pavelle Color, Inc., independent processor of amateur color film, were purchased last month by the Technicolor Corp., Hollywood, Cal. The purchase represents the first outright acquisition of assets and business of another company by Technicolor since the launching of its diversification program in 1955.

Cal. Ink Co. Appoints Parle

W. C. Parle has been named technical director of California Ink Co.'s expanded research program. The present 50-man chemical research staff in the firm's Berkeley plant is expected to be increased to about 75 by the end of the year. The firm plans to broaden its line of inks and colorants.

Mergenthaler In New Quarters

Mergenthaler Linotype Co. formally introduced its new San Francisco headquarters to its customers and friends at an open house held recently. The building contains 8,000 sq. ft. of floor space, and there is an adjacent parking lot. This was the San Francisco office's first move since 1907.

Union Signs Two Cal. Companies

The Oakland, Cal., Offset Reproduction Artisans Union No. 473, has signed contracts with Transocean Airlines, which operates camera, platemaking, and small press equipment, and California Life Insurance Co., which has platemaking and small press facilities.

Production speeded... quality control improved

with

LEEDAL

**TYPE 316
STAINLESS STEEL
EQUIPMENT
for GRAPHIC ARTS
PROCESSING**

HEAVY DUTY SINKS • TRAYS • PLATE TROUGHS

CORROSION-RESISTANT • STRONG • ECONOMICAL

LEEDAL — the complete line of top quality stainless steel processing equipment, all scientifically designed for dependable, faster, better work and ease of handling plates and film — thus assuring dividends in production and efficiency in your plant.

Available in a complete size range for every requirement

LEEDAL features • heli-arc welded joints • type 316 stainless steel • high lustre satin finish
(CUSTOM BUILT EQUIPMENT MADE TO ORDER)

SEE YOUR SUPPLY HOUSE REPRESENTATIVE OR
Write today for your free copy of Bulletin L55

LEEDAL STAINLESS STEEL PRODUCTS, INC.

2929 South Halsted Street • Chicago 8, Illinois

Schultz

DEEP ETCH

CHEMICALS

Proved dependable and economical in leading litho plants for more than a decade. You, too, will find it profitable to standardize on Schultz Chemicals for all your deep etch requirements.



**SCHULTZ
DEEP ETCH
CHEMICALS**

1240 W. Morse Ave., Chicago 26, Ill.

**1956 MODELS
BREAKING
ALL RECORDS**

Profit records for YOU . . .

NEW FEATURES

**greatest advance in Folder history . . .
doubling your net profits...for instance,**

2 folded signatures (from a single sheet fed into Folder) now come out where one came out before—of course in 1 automatic operation. And . . . from a single sheet fed into the Folder—you can have two separate sheets collated and folded together . . . of course in 1 automatic operation.

Thanks to you for ordering \$50,000,000. of BAUMFOLDERS, volume production keeps prices down . . . even in these days of high labor costs and high material costs, you can still install a 17½ x 22½ Automatic Bindery complete in one compact life-time "Gold-Mine" . . . that folds; cuts; scores; perforates; collates, etc., etc. for only \$85. initial and \$47. a month. It will pay-for-itself many times over before you pay for it. No finance charge . . . just simple interest. And other sizes comparable pay-for-itself terms . . . 14 x 20" or 22 x 28" or 25 x 38" or 31 x 46-60".

RUSSELL E. BAUM, INC.

615 Chestnut St.

Phila. (6), Pa.

P.S. Someone said—"he benefits humanity who makes two blades of grass grow where one grew before."

**WE WILL TEACH YOU
PHOTO OFFSET**

HALFTONE PHOTOGRAPHY • LINE PHOTOGRAPHY
OPAQUING and STRIPPING • BLACK & COLOR
PLATEMAKING • HARRIS • WEBENDORFER
MULTILITH • DAVIDSON

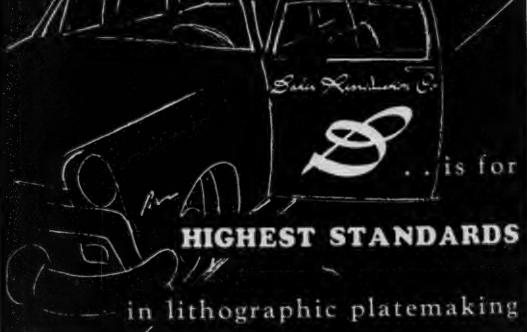
**MANHATTAN
PRINTING**

SCHOOLS
OF

72 Warren St.
(at Chambers)
New York City
Worth 2-4330

Two Minutes Walk from City Hall

208 So. Jefferson Street, Chicago 6, Ill.



Classified

ADVERTISING

All classified advertisements are charged for at the rate of ten cents per word, \$2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, \$1.00 minimum. One column ads in a ruled box, \$10.00 per column inch. Check or money order must accompany order for classified advertisements. Address replies to Classified Advertisements with Box Number, care of Modern Lithography, Box 31, Caldwell, N.J.

Help Wanted:

OFFSET SUPERINTENDENT with pressroom background, take complete charge of well equipped medium sized plant (including prep. dept.) High quality color & process work. Excellent opportunity for man with executive ability. Salary commensurate with experience. State qualifications in detail. Address Box 142, c/o Modern Lithography.

HAVE OPENINGS for experienced and trainee salesmen to represent large litho, printing, and lettershop firm. Metropolitan New York. State experience, salary or commission requirements. Address Box 143, c/o Modern Lithography.

OFFSET PRODUCTION MANAGER who has \$5,000 or more to invest. Large modern well-equipped plant in Florida, now doing over a quarter of a million a year, could do twice that much with right production

CHANGE TO WEB and QUADRUPLE your production

With less than \$20,000, you can have a new MILTON Web Offset, 17½" cut-off x 24½" Maximum Web Width. Available in one to five colors.

Acme Machinery Division
Acme Litho Plate Graining Inc.
34 W. Houston St., NYC — OR 4-0688

EGA

the RELIABLE Supplier
to the Lithographer

for SERVICE call Circle 6-3526
EASTERN GRAPHIC ARTS SUPPLY CO.
509 W. 56th ST., New York, N.Y.

manager. Owner does not know offset, and wishes to retire. Will make a very good proposition, with profit sharing and bonus to right man. Call Tyn Cobb, Jr., Orlando, Florida after six P.M., 2-8696.

PRESSROOM FOREMAN for large south western plant having single, two and four color sheet fed and two and four color perfecting roll equipment. Salary open subject to experience with sheet and roll presses. \$9,000 to \$12,000 range—Give details first letter. Address Box 144, c/o Modern Lithography.

CAMERAMAN, STRIPPER for modern trade shop. Top wages, permanent position with future for good craftsman. Reply by letter. Litho Sales & Service, 1114 Central Avenue, Charleston 2, W. Va.

Situations Wanted:

A thoroughly experienced cameraman, stripper and platemaker with 15 years experience as dept. foreman seeks connection as working foreman in small or medium sized shop. Will consider any location for right opportunity. Address Box 145, c/o Modern Lithography.

OFFSET PRESSMAN, doing quality process work on two color, letterpress back-

DOT ETCHER

The man we are looking for must be thoroughly experienced in process color work and desirous of a permanent position with premium wages in a modern progressive plant in Ohio. State experience, age and other details in letter.

Address Box 140, c/o Modern Lithography.

ground, supervisor experience, capable taking charge small shop or pressroom foreman. New Jersey, Southern New York, Eastern Pennsylvania preferred. Address Box 146, c/o Modern Lithography.

EXCEPTIONAL INK & LITHO SUPPLY EXECUTIVE NOW AVAILABLE! Modern Lithography has just learned that a man with over 25 years experience in the ink and litho supply field is open to the best proposition. This man has a fine record in administrative work and for the past 20 years has been secretary and on the board of directors of his company. Contact Modern Lithography, Box 147.

WANTED: A progressive lithographer who is looking for a technical specialist to assume responsibility for plant improvement in methods, standards and control, with emphasis on color. Box 148, c/o Modern Lithography.

TECHNICAL SPECIALIST: With outstanding record of achievement as technical advisor. A unique background of practical experience in lithographic production, trouble-shooting and trade training. Interested in responsible position with progressive plant involving technical supervision and in-plant training. Would also consider commensurate position with supplier or equipment manufacturer. Address Box 149, c/o Modern Lithography.

LITHO SUPT. FOREMAN with an outstanding background of 25 years. Employed as night Supt. in large Midwestern plant—operating a battery of large multi-color and 2 color litho presses. Excellent background on presses, color o.k.'s and lineup, also knowledge of plates. Will relocate. Address Box 150, c/o Modern Lithography.

Wanted: A Lithographer who doesn't want a thirty day wonder, but who does want a man of long experience in the pressroom for his Pressroom Foreman. A man that is capable of building good-will, supervising and training personnel with quality and production in mind. Address Box 153, c/o Modern Lithography.

Own a LUXOMETER

Find out from your dealer about the Lease Purchase plan to own a LUXOMETER. Free trial offer on your equipment — no obligation to purchase — no capital investment.

MEN WANTED — POSITIONS OPEN

Superintendent — Offset	EAST	\$12,000
Production Manager — Offset	NEW JERSEY	\$8,000-\$10,000
Pred. Supt. — Offset	LITOPRESS	INDIANA \$10,000-\$13,000
Foreman — Offset Pressroom	INDIANA	to \$10,000
Foreman — Letterpress Pressroom book manufature exp.	EAST	\$7,500-\$10,000
Foreman — Bindery (NIGHTS)	MIDWEST	\$7,000
Salesman — Supplies	COLORADO	OPEN
WANTED: Cameramen, platemakers, strippers, pressmen, compositors, prefraders, mem-type, folder operators, binderymen, etc. Offset pressmen in high demand.		
GRAPHIC ARTS EMPLOYMENT SERVICE		
Helen M. Winters, Mgr.		
Dept. M-9, 307 E. 4th Street		
Cincinnati 2, Ohio		

List Your Confidential Application With Us

DOT ETCH PROCESS Color Plates

PROMPT SERVICE
HALFTONE NEGATIVES & POSITIVES
DEEP ETCH PRESS PLATES

ZARWELL & BECKER

Offset Platemakers
223 N. WATER STREET •
MILWAUKEE 2, WIS.

For Best
Quality

DRY PLATES FILM PHOTO CHEMICALS

Lenses, Contact Screens
and accessories for the camera
and darkroom

K. SCHLANGER CO.

333 West Van Buren St., Chicago 7, Ill.
WEbster 7540

W.D.WILSON
PRINTING INK COMPANY LTD.
Fine Printing Inks

LETTERPRESS



LITHOGRAPHY

Est.

1865

5-38 46th AVE., LONG ISLAND CITY, N. Y.
TEL.: STILLWELL 4-8432

"OK"ie Developing Ink
"OK"ie Negative Opaque
Cameras, Lenses, Screens,
Arc Lamps, Printing Frames,
Whirlers and Sundries

Write today for prices and full information

E. T. SULLEBARGER CO.
114 LIBERTY ST., NEW YORK (6)
Phone: BEekman 3-9234

DRYING

for

WEB-OFFSET

GRAVURE • LETTERPRESS

Over 25 Years Dryer Experience

B. OFFEN & CO.

168 N. Michigan Ave., Chicago (1), Ill.

OFFSET PLATES COMPLETE

Deep Etch — Albumen — Presensitized

NEGATIVE SERVICE

Line and Halftone

OFFSET SUPPLIES

PROGRESSIVE LITHOPLATE AND SUPPLY CO.

435 N. State Street
Chicago 10, Ill.
Phones: SUperior 7-8116-8117-8351

Efficiency Approved

A Film
Scribing Tool
scientifically
designed for
Ruling Negatives



Litho Ruled Forms - QUICKER - EASIER - BETTER

* Perfect uniformity of rules — no film spoilage.
★ 6 cutting heads in set: 4 for single rules from hairline to 1-point
rules; 2 cutting heads for double rules.

A postcard will bring descriptive literature

Scriber Specialties

1729 East 4th St.

DULUTH MINNESOTA



A-1 USED PRESS EQUIPMENT

Harris 35 x 45 2/C Model LST
Harris 26 x 40 1/C Model LSQ
Harris 50 x 69 2/C Model LSG
Harris 41 x 54 2/C Model GT
Harris 41 x 54 1/C Model LB
Harris 42 x 58 2/C Model LTL
Harris 42 x 58 2/C Model LSK
Miehle 41 x 54 2/C Model #57

BOX M MODERN LITHOGRAPHY

SITUATIONS WANTED:

MARRIED VETERAN: Just completed two year course in lithographic school. Desires employment in trade. Layout, platemaking, camera—actual experience. Dependable and good habits. Can give reference. Address Box 151, c/o *Modern Lithography*.

EXPERIENCED LITHO RETOUCHER: age 40, now employed in large Cepetown, S. A. plant, would like to relocate in U. S. shop. Educated at Graphic Academy, Leipzig, Ger., and experienced for 25 years in European shops, including supervision of retouching department in large Holland plant. Capable of doing high class work. Address Box 152, c/o *Modern Lithography*.

MISCELLANEOUS:

SHORT RUN PUBLICATIONS BY OFFSET—will set up and organize a Publications Shop or department; train employees and supervisors to produce publications from manuscript copy to finished product. Hot metal, cold-type, or photographic typesetting coupled with modern camera, stripping, and platemaking techniques and high speed, quick-change roll-fed web offset perfector. Automation or tape operation and geared vernier controls where suited. Strictly a manufacturing approach applied to short run work. Salary or fee basis or term contract sufficient to complete assigned task. Box 154, c/o *Modern Lithography*.

FOR SALE:

FOR SALE: 2 modern Christensen Continuous Feeders, sizes 42 x 56 and 48 x 70, Floor Loading Models. Guaranteed A-1 condition. Fort Dearborn Lithograph Co., 6035 W. Gross Point Road, Chicago 31, Illinois.

Two Mann — L-236 — 25x38-2-color offset presses for sale. Both in perfect condition. Write Box 154, c/o *Modern Lithography*.

HARRIS TWO COLOR LTL Model 258 (new 1952) 42x58". Baldwin washups plus Baldwin agitators, A.C. 3 ph. 220 volt electrical equipment. Cleanly maintained for quality production, press runs like a jewelled watch movement—personal inspection will prove new machine efficiency. Priced to sell at under \$60,000. For October release. TYPE & PRESS of Illinois Inc. 3312 North Ravenswood, Chicago, P.S. We also have a current model Michele 61 Two Color Offset for sale, new 1950.

Can Be Seen In Operation

- 1—two-color GT Harris Offset Press 41 x 54 immediate delivery \$9000.00.
- 1—two-color GT Harris Offset Press 41 x 54 delivery 30 days \$9000.00.
- 1—Harris Offset High Pile—recently rebuilt from A to Z 28 x 42 S8L three month delivery \$11,000.00.
- 1—Lanston Monotype Step & Repeat machine—flatbed size 53 1/4 x 76 overhead lights—automatic timer chases, etc. immediate delivery \$1500.00. Phone OR 3-0900. Charles Offset Co., Inc., 37 West 3rd St., New York City.

GOOD EQUIPMENT AT SAVINGS

MS Cleveland Folder with continuous suction feeder and 32 page attachment. Mann 36 x 48 Two Color Offset Press, about four years old. Can be seen in operation. Act fast. A.T.F. Big Chief Offset Press, four years old, 30 em Intertype Universal Composing Machine, Model G4-4 SM with quadrigraphic device and other up to date essentials. The M. L. Abrams Co. Serving the Printing Industry progressively for 37 years. Main office, 1841 Prospect Ave., Cleveland 15, Ohio. Offices—Detroit, Toledo.

HELP WANTED:

Litho artist to head color department. Permanent position in modern Chicago plant. State experience, age and other details. Address Box 155, c/o *Modern Lithography*.

Graphic Arts Supply Salesman wanted—Good opportunity. National Steel & Copper Plate Co., 700 S. Clinton St., Chicago 7, Ill.

OPEN FOR PROPOSITIONS

Top-notch (color) Camera-man
Stripper-Foreman seeks permanent connection with Quality Offset House
Box 141, c/o *Modern Lithography*

WANTED

Lithographic Dot Etcher for fine color work. Experience in masking most advantageous. Steady position; excellent working conditions. Must be member of Union in good standing or acceptable to Union.

Advertisers Engraving Co., 126 Dorrance St. Providence, R. I.

BETTER
INKS
make
BETTER
JOBS

CARLSON
INKS
are
BETTER
INKS

Every pound
of Carlson ink
is backed by
our experience
of many years
of fine
ink making.

JOHN P.
CARLSON
INC.
420 Carroll St.
Brooklyn 15, N. Y.



FOR A REAL DEAL, CALL O'NEILL!

OFFSET PRESSES FOR SALE

22 x 29 ATF BIG CHIEF
17 1/2 x 22 1/2 ATF CHIEF, DE MODEL
17 1/2 x 22 1/2 HARRIS LTC
21 x 28 HARRIS MODEL LTC
17 1/2 x 22 1/2 CHIEF MAC



FRANK J. O'NEILL
The Graphic Arts Machinery Specialist
8 SPRUCE ST NEW YORK 38, N.Y. BE 3-7425

PRESSMEN'S INK HANDBOOK

By H. J. Wolfe

272 Pages

\$4.50 in U. S. A.
\$5.00 Foreign

CONTENTS

Chapter

1. **Properties of Inks** . . . Review of physical characteristics; general types of inks; steps in manufacture of inks; definition of terms.
2. **Purchasing Printing Inks** . . . Ink requirements and specifications; "doctoring inks"; selecting your supplier; estimating ink consumption for offset work and letterpress; ink coverage chart.
3. **The Private Ink Plant** . . . Analyzing some of the misconceptions as to the advantages of operating your own ink plant; discussion of the "basic ink system."
4. **Manipulation of Ink** . . . Color matching and what the pressman can safely do to "adjust" inks; ink storage, shelf life; additions of reducer, drier, varnish, etc.; improving body.
5. **Inorganic Pigments** . . . Properties and characteristics of pigments as they affect inks; discussions of natural and manufactured mineral pigments; charts showing properties and uses of ten mineral pigments and 18 important inorganic pigments.
6. **Organic Pigments** . . . History, preparation of intermediates; charts showing properties and uses of more than 45 important organic pigments; classification of dyestuffs.
7. **Black Pigments** . . . General discussion; characteristics and manufacture; lampblack; furnace black; thermal decomposition blacks; mineral black; manganese black; graphite; iron oxide black.
8. **Printing Ink Vehicles** . . . Vegetable drying oils; linseed oil and linseed oil varnishes; lithographic varnish; chinawood or tung oil;

Chapter

- soybean, oiticica oil; vegetable semi-and non-drying oils; alkyd, fish, rosin, fatty acid, mineral oils; pitch varnishes.
9. **Driers and Drying** . . . The six methods of drying; theories of drying; paste driers, japan driers; concentrated driers; cobalt driers.
10. **Letterpress Inks** . . . Ink classification, specification of stock; job press inks; automatic press ink; flatbed cylinder press inks; web press inks; required properties of the inks; relation of ink to stock; inks for various stocks and their requirements; halftone black inks and process inks.
11. **Lithographic Ink** . . . Requirements and characteristics are given for lithographic inks; offset printing inks; dry offset printing inks, etc.
12. **Intaglio Printing Inks** . . . Requirements of inks for intaglio printing; copper plate engraving inks; steel plate engraving inks; stamping inks; photogravure inks; rotogravure inks; classification of rotogravure inks.
13. **New Types of Inks** . . . Thermosetting inks; synthetic litho inks; hot wax inks; aniline inks; steam-set or moisture set inks; pressure set inks; silk screen inks; metallic inks; water color inks.
14. **Testing of Inks** . . . Equipment needed; dry color testing for strength; resistance, permanence, particle size, etc.
15. **Ink Problems and Remedies** . . . Ink difficulties encountered in letterpress and lithographic printing are detailed, listing the symptoms, causes and suggested remedies.

Glossary

TEAR OFF AND MAIL

INDUSTRY PUBLICATIONS

P. O. BOX 31

CALDWELL, N. J.

Enclosed is our check for \$4.50 (Foreign and Canada \$5.00). Please send me one copy of the PRESSMEN'S INK HANDBOOK. It is understood that I may return the book within ten days for full refund.

COMPANY

ADDRESS

BY

Index

to ADVERTISERS

SEPTEMBER, 1956

Acme Machinery Division.....	Facing 116
Alien Associates.....	Aug.
Amsterdam Continental Types & Graphic Equipment Co.....	143
American Graded Sand Co.....	Aug.
American Type Founders, Inc.....	122
American Zinc Products.....	Aug.
Anchor Chemical Co.....	127
Ansoe	29
Azoplate Corp.....	131
Baker Reproduction Co.....	174
Baum, Inc., Russell Ernest.....	174
Beckett Paper Co.....	July
Bensing Bros. & Deeney.....	107
Bingham Brothers Co.....	120
Sam'l Bingham's Son Mfg. Co.....	15
Bridgeport Engravers Supply Co.....	163
Brown, L. L. Co.....	101
Brown, W. A. Mfg. Co.....	139
Buckbee-Mears Co.....	Aug.
ByChrome Co., Inc.....	22
Cantine Co., Martin.....	3rd Cover
Carlson, Inc., John F.....	177
Central Compounding Co.....	141
Champion Paper Co.....	Aug.
Chemco Photoproducts Co.....	94
Chicago Litho Plate Graining Co.....	Aug.
Consolidated Water Power & Paper Co.....	62, 63
Consolidated Int'l Equip. & Supply Co.....	9, 32, 33, 86, 87, 98, 99, 114
Craftman Line-up Table Corp.....	138
Crescent Ink & Color Co.....	81, 82
Cross Siclare & Sons, Inc.....	148D
Curtis Paper Co.....	157
Dayton Rubber Corp.....	68, 69
Dexter Folder Co.....	31
DiNoe Co.....	Aug.
du Pont de Nemours & Co., E. I.....	Aug.
Eastern Corp.....	44
Eastman Kodak Co.....	71
Falulah Paper Co.....	20
Fitchburg Paper Co.....	28
Flint Ink Co., Howard.....	14
Foot Finishing Co.....	148F
Foot & van Wie Co.....	158
Frangos, William A., Inc.....	27
Gaotjens, Berger & Wirth, Inc.....	19
Gegenheimer Co., Wm.....	148
General Plate Makers Supply Co.....	162
General Printing Ink Co.....	102
Gevaert Co. of America, Inc.....	154
Godfrey Roller Co.....	18
Goers American Optical Co., C. P.....	149
Goodyear Tire and Rubber Co.....	Aug.
Graphic Arts Corp. of Ohio.....	Aug.
Grumbacher, M., Inc.....	147
Gurin-Rapport	12
Gummeproducts Co.....	July
Hamilton & Son, W. C.....	Aug.
Hammermill Paper Co.....	30

Handschy Co., A. E.....	158
Harris-Seybold Co.....	4th Cover
Hantsoho, George	172
Herbert Products	170
Herrick Ink Co., Inc., William P.....	148B
Hess & Barker.....	126
Hill Rubber Co., Inc.....	147
Hoe, R. & Co.....	June
Howard Paper Co.....	41, 42
Hunt Co., Philip A.....	88
Ideal Roller & Manufacturing Co.....	145
Iford, Inc.....	118
Illinois Zinc Co.....	Aug.
Interchemical Corp.....	38, 39
International Paper Co.....	35, 36
International Press Cleaner & Mfg. Co.....	Aug.
Intertype Corp.....	4
Jahn & Ollier Engraving Co.....	172
Jomac Products	123
J. F. Kelly, Inc.....	170
Kimberly-Clark Corp.....	24, 25
Kleen-Stik Products, Inc.....	167
Knox Soap Co.....	June
Korn Co., Henry P.....	136, 171
Krug Electric Co., Inc.....	148F
Lanston Monotype Machine Co.....	37
Lawson Co., E. P.....	13
Leedal Stainless Steel Products, Inc.....	174
Lewis Roberts, Inc.....	59
Litho Chemical & Supply Co.....	34
Lithographers Plate Graining Assn.....	162
Lithographic Plate Graining Co. of Americas	166
Lithoplate, Inc.....	21
Machbeth Arc Lamp Co.....	73
Mack, Norman A., Associates.....	17
Mallinckrodt Chemical Works.....	170
Manhattan School of Printing.....	174
McAdams & Sons, Inc., John.....	July
McLaurin-Angler Co.....	83, 84
Mead Corp., The.....	93
Mergenthaler Linotype Co.....	2nd Cover
Miehle Printing Press & Mfg. Co.....	135, 155
Minnesota Mining & Manufacturing Co.....	113
Daniel Murphy & Co., Inc.....	148F
National Association of Photo-Lithographers	90
National Carbon Co., Div. of Union Carbide & Carbon Co.....	Aug.
National Steel & Copper Plate Co.....	164
Neens Paper Co.....	97
Nekoosa Edwards Paper Co.....	11
New York & Pennsylvania Co.....	128
Northwest Paper Co.....	July
nuAr Co., Inc.....	159
Nuclear Products Co.....	July
Offen & Co., B.....	176
Offset Engravers Associates.....	148D
Ortman McCain Co.....	161
Oxford Paper Co.....	79, 80
Oxy-Dry Sprayer Corp.....	26
Paper Manufacturers Co.....	146
Parsons Paper Co.....	April
Photo Litho Plate Co.....	168
Pitman, Harold M., Co.....	16
The Printing Machinery Co.....	Aug.
Printing Developments, Inc., Time, Inc.....	40
Progressive Lithoplate and Supply Co.....	176
Fyroxyline Products, Inc.....	133
Rapid Roller Co.....	Aug.
Recht Co., William.....	142
Repro Graphic Machines, Inc.....	Aug.
Roberts Inc., Lewis.....	59
Roberts & Porter, Inc.....	3
Robertson Photo-Mechanix, Inc.....	Aug.
Rogers Co., The Harry H.....	129
Roll-O-Graphic Corp.....	6, 7
Rosback Co., F. P.....	156
Rothlan Corp.....	146
Royal Zenith Corp.....	66
Rutherford Machinery Co.....	165
Saltzman J. G. Inc.....	152
Schlanger, K.....	176
Schmidt, H. & Co.....	150
Schultz, H. J.....	168, 174
Scientific Litho Products Co.....	166
Scranton Plastic Laminating Co.....	169
Scriber Specialties.....	176
Siebold, J. H. & G. B., Inc.....	23
Simeco Co.....	142
Sinclair & Valentine Co.....	10, 110, 160
Strathmore Paper Co.....	Aug.
Stevenson Photo Color Separation Co., The	168
Stockinger & Langbein.....	148F
Strong Electric Corp.....	137
Sullebarger Co., E. F.....	176
J. F. Tapley Co.....	148H
Tetelbaum Sons, Inc., N.....	153
Tickle Engineering Works, Inc., Arthur.....	134
Toledo Lithograph & Plate Co.....	Aug.
Uniform Graining Corp.....	Aug.
Varn Products Co., Inc.....	172
Vulcan Rubber Products.....	119
Wagner Litho Machinery Div.....	108
Warren Co., S. D.....	104, 105
Wesel Manufacturing Co.....	130
West Virginia Pulp & Paper Co.....	Aug.
Whiting-Plover Paper Co.....	124
Willoughbys	148H
Willy's Plate Graining Corp.....	168
Norman Willits Graphic Supply Co.....	125
Wilson Printing Ink Co., W. D.....	176
Winsor & Newton, Inc.....	Aug.
York Display Finishing Co.....	148H
Young Brothers Co.....	July
Zarwell & Becker	176

(The advertisers' index has been actually checked but no responsibility can be assumed for errors or omissions.)

Tale Ends

OFFSET gained a certain degree of notoriety in a recent news item that we noticed in a Philadelphia newspaper. The item told about an expense of \$5,000 for 300 extra copies of an "efficiency" report that the Pennsylvania Turnpike Commission ordered from an offset printer. The report ran to 131 pages.

Some quick arithmetic reveals that the "efficiency" report cost the Turnpike Commission \$16.67 a copy. The commission chairman thought that wasn't a bad price for a rush job. Seems a mite high to us. But then, maybe the bill was bulked up a bit with charges for "author's alterations."

ML

A cute 23-year-old Japanese girl with an unusual undergraduate background in American Drama is attending the Carnegie Tech School of Printing Management, preparing for a career in the printing field. Raven-eyed Keiko Nakamura is studying printing management and offset photography at the school's summer session. She intends to take courses in graphic printing at Los Angeles City College in the fall and then return to Japan to work for her father, Mr. Tokuzo Nakamura, who runs a small art printing company in Tokyo.

ML

Our British cousins, on the trade paper *Modern Lithographer and Offset Printer*, reported in a recent issue on a leaflet issued by the British Carton Association, dealing with odor from printing ink. It was turned out by a sub-committee representative of food, printing and packaging interests. It spoke of the drying problems in offset caused by the dampening system, the possibly incorrect use of

additives in fountain water and possibility of acidity or moisture content of stock delaying drying.

"As odor arises directly from the process of oxidation during the drying of the ink film, the special drying problems associated with the offset process constitute a standing temptation to the printer to accelerate the process by excessive use of driers and

other additives." Hence, the leaflet cautions, lithographers should use restraint in this area. "Lack of standardization in paper stocks admittedly calls for some adjustments of inks, but if these exceed two per cent by driers or six per cent by reducers," it went on, "the ink maker should be consulted."

Other recommendations were these:

1. *The ink maker should be told that the ink is to be used on food wrappers.*

2. *The lithographer should try out the drying properties of the ink on the stock to be used.*

3. *He should make sure, when using minimum reducers, that the reducers are suitable for the ink.*

4. *He should always use inks at maximum color strength and print with the thinnest possible film.*

Put All Your Eggs In One Basket!



REGARDLESS of the old adage, it sometimes makes sense to put all your eggs in one basket; if you have the choice between one strong basket and several weak ones.

In advertising, it's far better to concentrate your program in the leading magazine in the field. That way, the people who really count will be sure to see your message—and read it often.

In the lithographic field, the strongest basket is, of course

MODERN LITHOGRAPHY

Box 31

Caldwell, N. J.

Member, Audit Bureau of Circulations

Plan for Quality

Pictures of people and pets...and advertised products...show to particular advantage when reproduced by fine-screen halftones on brush-coated paper. Ask your merchant for specimens of Cantine's brush-coated—leaders in quality for nearly 70 years.

THE MARTIN CANTINE COMPANY

Specialists in Coated Paper since 1888

Saugerties, N. Y. and New York City

In San Francisco and Los Angeles—

Wylie & Davis

Cantine's BRUSH-COATED PAPERS

LETTERPRESS: • Hi-Arts • Ashokan • M-C Folding Book • M-C Folding Cover • Zena • Catskill • Velvetone • Softone • Esopus Tints • Esopus Postcard

OFFSET-LITHO: Hi-Arts Litho C.I.S. • Zenagloss C.2S. • Zenagloss Cover C.2S. • Lithogloss C.I.S. • Catskill Litho C.I.S. • Catskill Offset C.2S. • Esopus Postcard C.2S. • Esopus Tints

Photo by LEONARD SEIKEN

We made a movie but YOU called the shots

Harris-Seybold cutter technicians worked out details for a new color movie, *The Safer Saber*.

But the sum and substance of our script came from data gathered in cutting rooms throughout the graphic arts. You and others concerned with higher standards of accuracy and production for paper cutting called the camera shots.

The result is a factual, 18-minute movie report of vital interest to everyone involved in cutting the cost of cutting. You can see it in your own office, right now, by phoning your nearby Harris-Seybold sales office at the number listed below, or writing Harris-Seybold Company, 4510 East 71st Street, Cleveland 5, O.



Star of the show, *The Safer Saber*, is a seasoned performer.

**HARRIS
SEYBOLD
COMPANY**

SEYBOLD CUTTERS

Harris Presses • Seybold Cutters • Harris Litho-Chemicals
Special Products • Cottrell Presses • Platemaking Equipment
Macey Collators

Atlanta.....	Elgin 3657	New York.....	ORegon 3-3930
Baltimore.....	PLaza 2-8423	Philadelphia.....	Rittenhouse 6-7044
Boston.....	Liberty 2-8168	San Francisco.....	MArket 1-7925
Chicago.....	FRanklin 2-0551	St. Louis.....	FRanklin 1-4451
Cleveland.....	TOwer 1-4090	Washington.....	NOrth 7-2267
Dallas.....	RAndolph 8785		
Dayton.....	HEmlock 5851		
Los Angeles.....	DUnkirk 7-3219		
Minneapolis.....	FEderal 3-2231		

CANADA

Montreal.....	UNiversity 6-8836
Toronto.....	EMpire 3-6153

RS
chemicals
equipment

30
44
25
51
67

36
53